

Sandy City

Downtown Illustrative Master Plan



ADOPTED JULY 9, 2002

Cooper Roberts Simonsen Architects
RNL Design
Fehr & Peers Associates
Bonneville Research

Table of Contents

Description	Page
Acknowledgements	iii
Introduction	
Background	1
Study Area	3
Existing Conditions	
Existing Land Uses and Zoning	5
Current Zoning Map	9
Physical Characteristics	11
Current Aerial Photograph	15
Illustrative Plan	
Overview of Illustrative Plan	17
Downtown Illustrative Plan	19
Overview of Districts	21
Central Business/Retail District	23
Transit Oriented Development District	31
Entertainment/Business District	37
Proposed Land Use Regulatory Map	43
Mobility Analysis	
Overview	45
Street Network Comparisons	48
Streets & Exploratory Corridors Map	49
Transit Map	51
Trails & Open Space Map	53
Travel Demand Forecast Summary	55
Economic Analysis	
Retail Market Highlights	59
Residential Market Highlights	63
Design Guidelines	
General Guidelines	67
Overview of Street Guidelines	71
Street Guidelines	73
Implementation	
Overview of Action Plans	95
Central Business/Retail District Action Plan	97
Transit Oriented Development District Action Plan	99
Entertainment/Business District Action Plan	101
Appendix	
Schedule of Shared Parking	Appendix A
Traffic Impact Analysis	Appendix B
Economic Analysis	Appendix C

This document was prepared by Cooper Roberts
Simonsen Architects, with contributions by:

Cooper Roberts Simonsen Architects

Søren D. Simonsen, AIA, AICP

Allison Drinkwater

Deborah Martin

Ed Merrill

RNL Design

Patric Dawe, AIA, AICP

Jim Leggitt, AIA

David Burczyk

Fehr & Peers Associates

Jon Nepstad, AICP

Ryan Hales, PE, AICP

Scott Jones

Bonneville Research

Bob Springmeyer

Photo/Illustration Credits:

Photos: Allison Drinkwater

(Pages 1, 67 top)

Photos: Bob Springmeyer

(Pages 5, 6)

Photos: Sandy City

(Page 11)

Photos: Søren Simonsen

(Pages 67 bottom, 68, 70)

Illustrations: Jim Leggitt

(Cover; Pages 19, 24, 26, 27, 28, 29, 32, 33, 38, 39,
40, 41)

Illustrations: Deborah Martin

(Page 3, 21, 23, 31, 37, 48)

Illustrations: Sandy City

(Page 9)

Illustrations: Søren Simonsen

(Page 15)

Illustrations: Allison Drinkwater, Søren Simonsen

(Page 43)

Illustrations: David Burczyk, Deborah Martin,
Søren Simonsen

(Pages 49, 51, 53, 71)

Illustrations: Bob Springmeyer

(Page 59)

Illustrations: Peter Calthorpe, *The Next American
Metropolis*

(Pages 68, 69)

Illustrations: Cooper Lighting

(Page 69)

Illustrations: Deborah Martin, Ed Merrill, Søren
Simonsen

(Pages 73, 75, 77, 79, 81, 83, 85, 87, 89, 91, 93)

Acknowledgements

In addition to the many residents and business owners who shared their valuable time and input, Cooper Roberts Simonsen Architects would like to thank the following individuals for their contributions in creating and reviewing this document.

City Council

Tom Dolan, Mayor
Scott Cowdell, District 1
Dennis Tenney, District 2
Bryant Anderson, District 3
Don Pott, District 4
Crickett Raulston, At-Large
Linda Martinez-Saville, At-Large
John Winder, At-Large

Planning Commission

Dawn Bender
Max Burdick
Todd Kaiser
Darren Mansell
Donald Milne
Ken Reber
Bruce Steadman
Pauline Crump, Alternate
Nancy Day, Alternate

Community Development Department

Michael Coulam, Community Development Director
George Shaw, Planning Director
James Sorensen, Long Range Planning Manager
Brian McCuiston, Planning Staff

Steering Committee

Duff Astin, Police Department
Peggy Bird, Neighborhood Coordinator
Wally Bowler, Neighborhood Coordinator
Chris Collins, Utah Transit Authority
Kaye Davies, Real Estate
Tony Doty
David Evans, Hillcrest Investments
Paul Goodrich, Transportation Engineer
John Hiskey, Economic Development Director
Charles Horman, Hillcrest Investments
Chris Howells, Hillcrest Investments
Byron Jorgenson, Sandy Chief Administrative Officer
Randy Kennedy, America First Credit Union
Les Larson, Neighborhood Coordinator
Richard Lyman, Fire Marshal-Fire Department
Dan Medina, Park Superintendent
Roger Miller, Jordan Commons
Merlynn Newbold
Mike Olsen, OMH, L.C.
Gillian Openshaw
Mark Pace, Boyer Co.
Duaine Rasmussen, Johansen/Thackeray
Dan Simons, Real Estate Consultants
Rick Smith, Public Works Director
Rod Sorensen, Chief Engineer-Public Utilities Dept.
Brittany Weaver, OHM L.C.
Lynn Woodbury, Woodbury Corporation
Duncan Wright, First Security Bank



Background

Purpose

The purpose of the Sandy Downtown Illustrative Master Plan is to present a comprehensive plan that guides the future development for the central business and commercial district in Sandy. With a population of approximately 100,000 Sandy City is the fourth largest municipality in the State of Utah, and is particularly well known for the high quality of life enjoyed by its citizens and its vibrant and booming commercial growth. Sandy is a family community, where children attend nationally recognized schools and where many cultural and family events occur.

A strong economy, low unemployment rate, strong family atmosphere, and some of the world's finest winter and summer recreational opportunities in close proximity, provide Sandy with a promising future, as long as this high quality of life can be preserved. This plan is to be used by residents and business owners, developers and property owners, City department staff, the Planning Commission, and the City Council as a policy guide for decisions made as to the type and intensity of infill and redevelopment throughout the downtown area. The master plan should be a guidebook for consideration of private development (commercial, residential, institutional, etc.), implementation of public improvements (streets, trails, infrastructure, etc.), and preservation of community resources and amenities (open space, mobility, cultural activities, etc.).

Planning Process

Existing development in the Sandy Downtown areas has been guided by a previous Master Plan prepared in 1996. The planning staff began the focused process of updating this plan in 2000 with a series of community input events, including a series of



Participants review and comment on consultant concepts and recommendations at a Design Workshop in April 2001.

maps prepared by residents, property owners, and other key stakeholders. These maps illustrated the desire for certain types of development patterns consistent with a more urbanized civic center than exists elsewhere in Sandy. A multi-disciplined consulting team was selected in November 2000 to assist with preparation of the Illustrative Master Plan. A Steering Committee, which consisted of residents, business owners, property owners, developers, City Staff and City Officials was formed by the planning staff to provide input, review, and give direction to the preparation of the Master Plan. Ongoing public input was obtained through Focus Groups and Open Houses where the community



Public Open Houses such as this one in April 2001 provide opportunities for questions and comments by residents and business owners in the Sandy community.

Introduction

was invited to review progress and provide input to key consultant recommendations. Once the Steering Committee voiced its support of the draft plan, the document was presented for public hearings held by the Planning Commission and City Council with final adoption by the City Council.

General Overview

This community plan updates the Sandy Civic Center Sub-Area Master Plan that was adopted in September 1996, with information specific to the Sandy Downtown area. The plan provides:

- Recommendations for the development of distinct districts within the downtown area, and the types of development patterns consistent with characteristics, existing uses, and opportunities for each;
- Recommendations for expanded housing choices to meet the needs of a growing and changing population base;
- Recommendations for new and expanded retail opportunities and employment centers;
- Recommendations for improved mobility options including automobile, transit, pedestrian and bicycle systems; and
- Recommendations for a trails and open space network that is accessible to residents and businesses.

Implementation

This Master Plan is a long-term vision for the Downtown Sandy area. As this area continues to grow and develop, choices must be made that will satisfy the current needs while preserving the viability of the community for generations to come. A phased approach to implementation is suggested later in this document, which will require participation by all stakeholders: residents, business owners, property owners, City staff, and elected officials.

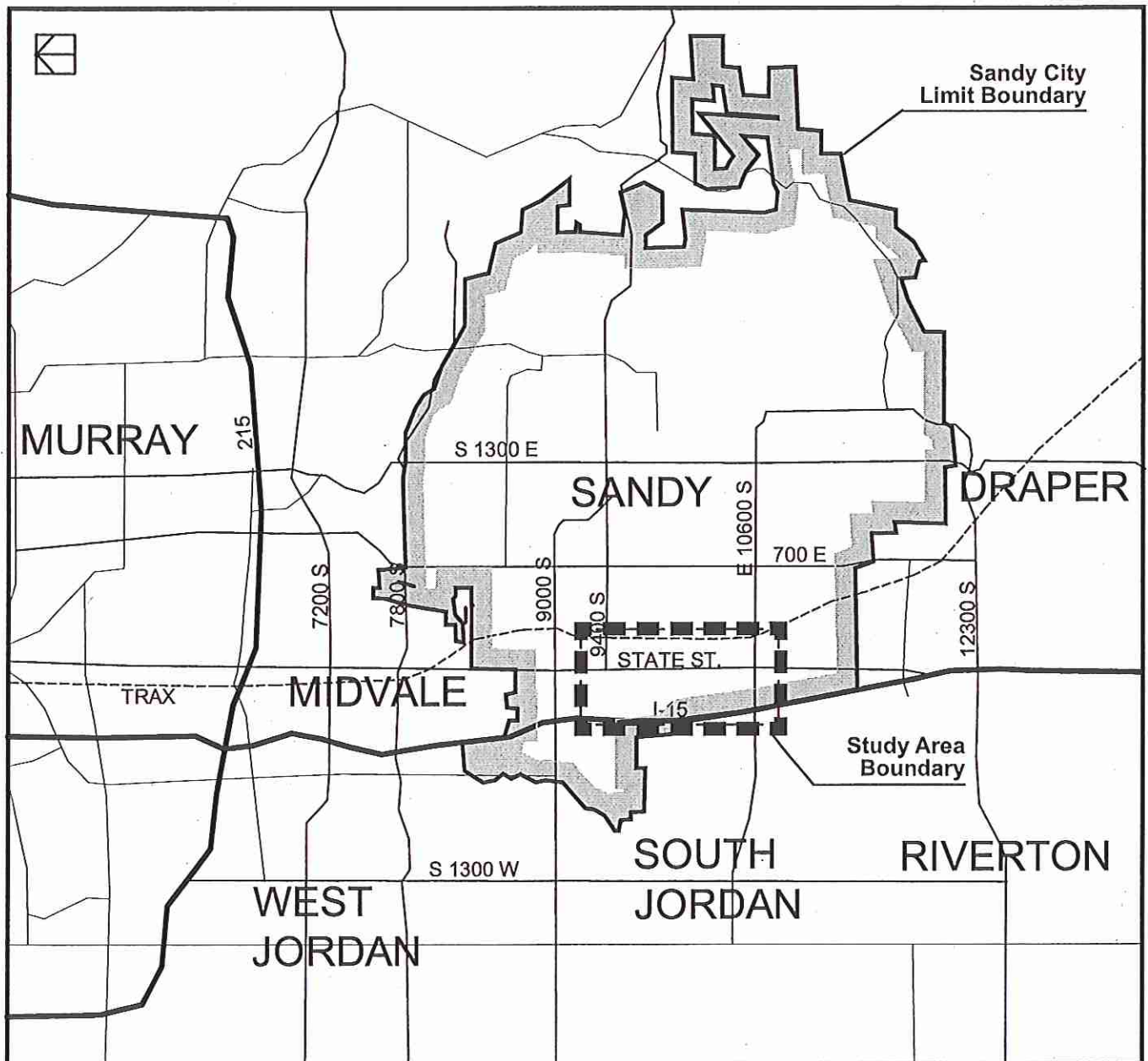
Short-term implementation will focus on areas that are presently undeveloped or underdeveloped. Some improvements may require a change in direction for projects that have already been considered, but not yet built. In time, existing properties that are nonconforming can be altered and improved to better meet the future needs of the entire community, and create positive economic growth opportunities for the owners. In an area as highly developed as Sandy Downtown, it is important that individual property rights are balanced with overall community goals and objectives. Maintaining the strong, diverse economy and family environment that characterize Sandy City today should continue to be a central focus in making wise decisions for the future.

Study Area

Description of Study Area

The following map indicates the boundaries of the Sandy Downtown Illustrative Master Plan study area within the context of the entire Sandy City community. The boundaries roughly follow 9270 South on the northern end, south along the I-15 corridor, east across 10600 South, and north along

the TRAX light rail corridor. Excluded from this study area are the Jordan High School property and the residential subdivision south of 10200 South and east of the lower canal to the east of State Street between 10200 and 10600 South. Information about the specific characteristics of the study area is included in the Existing Conditions section of this report.



Introduction

Existing Land Uses and Zoning

Commercial Retail

Existing commercial retail uses in the Study Area are located primarily along 10600 South and the lower portion of State Street below 10200 South. A few restaurants and small business are located near the intersection of 9400 South and State Street. State Street has historically been a commercial corridor through Sandy to the north of 9400 South, however, recent retail development has been more focused in the super-regional shopping center in and around the South Towne Mall and the Auto Mall further to the south.



South Towne Mall is an important part of the regional retail shopping center in Downtown Sandy.

Commercial Office

Small-scale commercial office space exists along most major roadways, including 10600 South, State Street, and 9400 South. More recent developments of much greater density and significance have been developed in areas surrounding the new City Hall along Centennial Parkway and 10000 South, and in the Jordan Commons development near the intersection of 9400 South and State Street.



Commercial office space is centered in the area surrounding City Hall, pictured here along 10000 South.

Civic

The Sandy City Hall, a recent building completed in 1994, is located near the center of the study area. Surrounding the City Hall in separate facilities are a courts complex, education complex, and land for possible future expansion or development.



Sandy City Hall is an important focal element in the Downtown area.

Existing Conditions

Entertainment/Cultural

The recently completed South Towne Exposition Center, located near the intersection of 9400 South and State Street, was completed in 2000, and has become a regional attraction for trade shows and special events. The large cinema complex at the nearby Jordan Commons center, as well as sports, music and theatrical events at the Jordan High School offer many family-oriented activities during the week throughout the year. Other cultural facilities such as museums, libraries, performing arts centers, galleries, etc. are located elsewhere in the community, outside of the study area.

Institutional

The University of Utah extension campus located adjacent to City Hall, and the new satellite campus of Salt Lake Community College located just west of I-15 near 9400 South provide higher educational opportunities to local residents and businesses.

Industrial

Beckton & Dickinson, a large manufacturer of medical supplies and equipment, is the only large light industrial employer within the study area. Several small mechanic and equipment shops and businesses are located along 9400 South to the west of State Street.

Residential

Most existing residential areas lie outside of the Study Area, with the exception of the Alta View estates retirement community located just north and east of the City Hall complex, and the Brandywine Apartments at the west side of the ridge above City Hall to the north. A few farm houses and a small subdivision remain along 9400 South. Sego Lily Drive, which is a primary east-west corridor

through the community, is a residential collector to the east of the light rail corridor.

Adjacent Land Uses

East

The east boundary of the Study Area consists mostly of open park space along the light rail corridor near the TRAX Station, and residential subdivisions to the north and south.



The TRAX terminus station in Sandy is a major transit hub on the eastern edge of the Downtown area.

South

The southern boundary is bordered by the Utah Auto Mall, a regional automobile retail center, as well as a significant hotel district.



The Utah Auto Mall to the south of the Downtown area is an important part of the regional retail center.

North

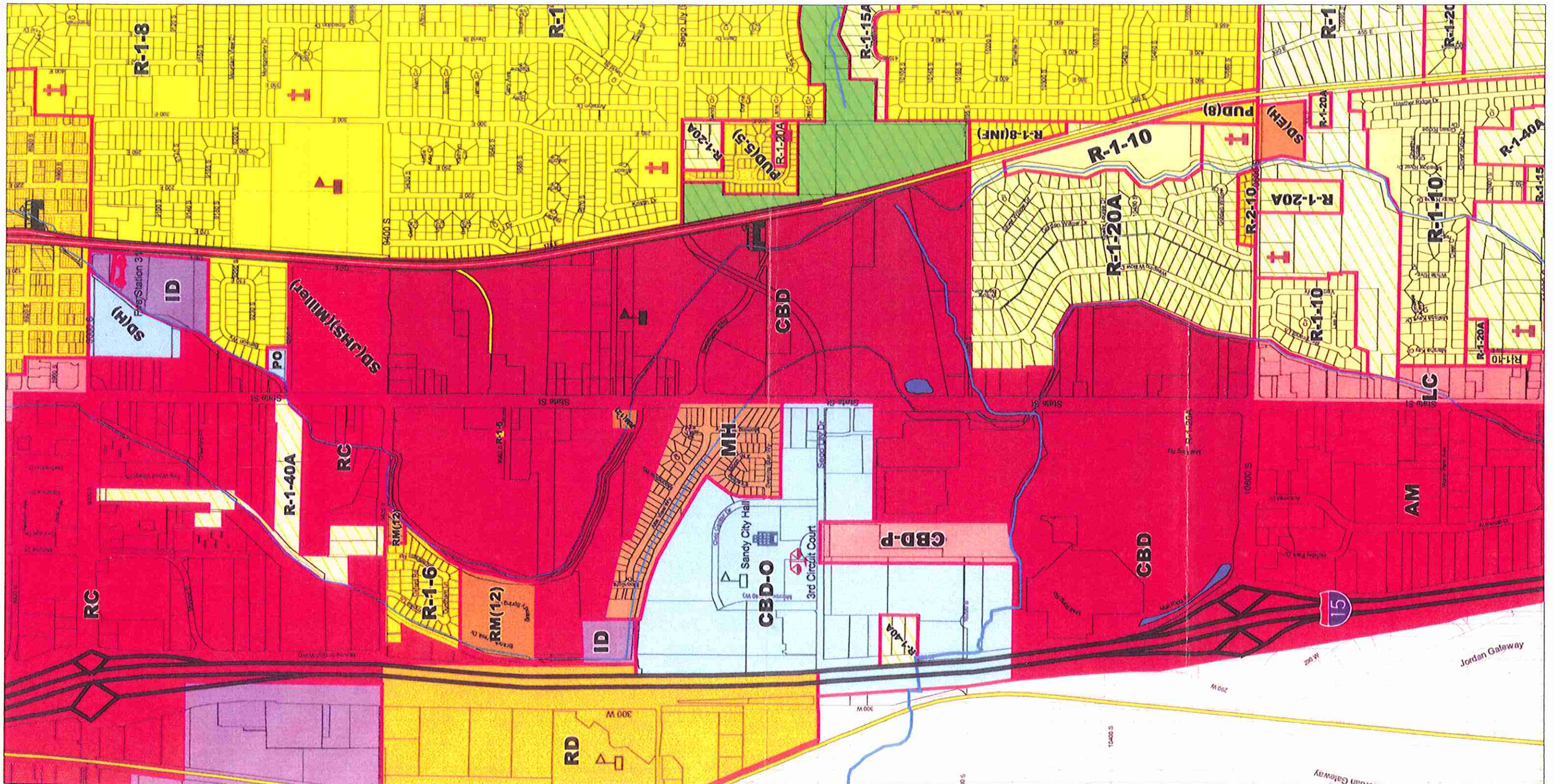
Beyond the north end of the Study Area, there are a few isolated large tracts of undeveloped property. Most developed land to the west of State Street is retail, light industrial, and manufacturing. To the east of State Street are the Mount Jordan Middle School and residential subdivisions.

West

I-15 forms the western boundary, and is a formidable barrier except for a major interchange at 10600 South, and an underpass at 10000 South. I-15 is also the boundary between Sandy and South Jordan to the west, through a portion of the study area. Recent projects completed along the I-15 frontage road in South Jordan include several new office towers and hotels.

Existing Conditions

Current Zoning Map (July 2001)



Existing Conditions

Physical Characteristics

Topography

The north and south end of the Downtown Area are bisected by a moderately sloped ridge bounded by canals at the top and bottom of the slope. The ridgeline roughly runs from northwest to southeast, with the north end of the Downtown being about 50 to 60 feet higher in elevation. Above and below the ridge, the terrain is relatively flat, with gentle slopes less than 5%. A seasonally dry creek runs from east to west just to the north of 10200 South, and enters a culvert near the intersection of 10200 South and State Street.

Climate/Hydrology

Sandy is located in a high desert climate. Historically, the valley floor was mostly tall prairie grasses, cedar and sage, with groves of cottonwoods clustered along canyon creeks. The lower, south end of Downtown has a high water table, which supported bushes and brush. Average seasonal temperatures range from the mid 30's in winter to the high 90's in summer. The relative humidity is generally below 30%, and diurnal (daily) temperatures swings are 25 to 30 degrees. The prevailing winds are from the west to northwest and are generally mild, with occasional strong canyon winds from the east. Annual precipitation is approximately 15".

The Neff Grove area near State Street and 10200 South, and the north end of the South Towne ring road is a wetland, with historical significance. Other wetlands include the Dry Creek corridor, which also has an associated 100 year flood plain within a relatively short setback from the creek. The two canals which traverse the Downtown are seasonally flowing for agricultural irrigation. There are no presumed water rights available in the Downtown area from these canals.

Views and View Corridors

The Wasatch Mountain peaks to the east are impressive, and from about three stories up, over the treetops and rooftops, the foothills are also visible. Views of Salt Lake Valley to the south from the top of the ridge are also impressive.

View corridors to City Hall and Centennial Parkway from the ridge top and from I-15 can give a snapshot of the Downtown area, and can be preserved.



View of Sandy, Foothills and Little Cottonwood Canyon in the Wasatch Mountain Range. Local climate is excellent for outdoor activity.

Transportation & Mobility

Automobiles

The private automobile is the predominant transportation mode, and will likely continue to be the primary mode of transportation in and around the Sandy Downtown area. One of the greatest challenges to automobile use is that there are only a few arterial streets that carry almost all of the traffic in and around the downtown area. This creates tremendous congestion during peak times of day and at peak seasonal periods in the regional retail shopping areas. Drivers often use primary roads to circulate between adjacent businesses which adds to the travel demand.

Existing Conditions

Most parking areas are designed for single-trip use. Little or no consideration is given to the capability of parking areas to serve multiple users where peak demands occur at different times of the day. Office use, for example, has its peak parking demand during the day on weekdays while entertainment and retail have a greater evening and weekend demand. Consequently, many parking lots which are sized to accommodate single-trip demand are usually mostly empty.

Transit

Transit use has increased dramatically since the TRAX light rail system began operation in 1999. Park and Ride facilities are at capacity daily. A recent expansion of these facilities has increased parking capacity for the Sandy Station at 10000 South, which is the present end-of-line. Bus service is primarily focused on regional commuter (i.e. to Downtown Salt Lake City) connections to and from the light rail line. Local service that links Downtown Sandy with nearby neighborhoods and other Sandy destinations has improved with recent re-alignment of routes to service the TRAX station hub. The infrequency of service and limited streets served by local routes makes it difficult to use the bus as a primary local transit mode. There are presently no significant destinations—employment centers, neighborhoods, shopping centers, etc.—that are within walking distance (approximately 1/4 mile) of the Sandy Station.

Pedestrians

As commercial office residential development continues in the Downtown area, the opportunity for increased pedestrian traffic demand exists. Pedestrian amenities, however, are very limited. There are many roads and streets that have no sidewalks or discontinuous sidewalks. Sidewalks along busy streets are often not located to provide a buffer between pedestrians and cars, and many sidewalks have no pedestrian amenities such as shading, benches, and appropriate lighting for night use.

Traffic speeds along many roads are not conducive to pedestrian safety.

Many pedestrian crossings are not well designed for safety because the streets are too wide and/or the signals are too short, and because the crossings are not well marked to alert automobile drivers. It is notable that with a high school and junior high school located adjacent to the study area, that there are very few students that walk or ride their bicycle to school. Safety concerns may be one possible reason.

There are areas that have tremendous potential—along 10000 South and Centennial Parkway—which have been designed with pedestrians in mind. Challenges to people using these are that employees who work downtown are usually too far from restaurants and shops to walk during a lunch break, or before or after work, and most end up driving to these daytime destinations.

Bicycles

There are limited bicycle routes—such as the Class III route on Sego Lily Drive from I-15 to Eastdell Road—within the downtown area. Many of the same safety concerns for pedestrians also pertain to bicyclists, although experienced cyclists are more likely to share roadways with automobiles than children. There are plans to link regional trails—such as the Bonneville Shoreline and Jordan River Parkway—together through the downtown area, and these links have the potential to also tie-in with major downtown destinations and employment centers.

Secure public parking facilities for bicycles are not evident in the downtown area, and it does not appear that employers and shopping centers have provided these facilities for their employees or customers.

Bicycle facilities for transit users are improving. All UTA busses and the light rail system have limited bicycle carrying capacity. Transit stops, however, have no bicycle station for secure bicycle parking or storage, and bicycle trails to transit hub facilities are limited.

Street Systems

The street system that carries automobile, transit, and pedestrian traffic in and around Downtown Sandy is inefficient by placing a tremendous demand on a very few arterial roads such as State Street, 10600 South, Sego Lily Drive, and 9400 South. Many streets into residential areas, and some streets in business districts are dead-end or cul-de-sac conditions. Some private roads—such as the ring road around South Towne Mall—which are not publicly maintained are carrying far more traffic than was intended by their design.

Overall, the street grid and connectivity are poor. Most successful urbanized areas, especially in central business and civic districts, have a street grid with regular blocks in the range of three to eight acres. The Salt Lake County grid system is based on the Salt Lake City plat of 660 feet square, or ten acres, and block sizes in the Sandy Downtown area, which are often irregular, are much larger. The development patterns for these “super-block” street grids typically results in more cul-de-sacs and internally oriented developments, which ultimately will put an even greater burden on the already overburdened arterial system.

Architecture

Most buildings located in the Downtown area have been constructed in the last thirty years, with the exception of a few existing brick bungalow farmhouses located along 9400 South and several businesses at the upper end of State Street in the study area. Most large commercial buildings, especially

offices, are built of durable materials (stone, brick, masonry, glass), and have a life expectancy of 50+ years with proper maintenance. Small retail shops and restaurants are built of synthetic stucco and masonry, and have a much shorter life cycle, probably in the 30-40 year range. Framing systems are much more durable, and the life expectancy for these buildings is much greater with regular maintenance. Exterior finish upgrade and replacement with more durable materials can significantly extend the life of these buildings. Most residences are much lower quality, including manufactured homes, and have a life expectancy of 30+ years with proper maintenance. Exterior finish upgrades can greatly extend the life of these buildings.

Generally, large commercial and civic buildings are simple and unadorned post-modern type designs. Larger retail buildings do not articulate a well developed sense of proportion or scale, as these are generally not designed with pedestrians in mind. Offices tend to have a greater sense of overall proportion through change in materials from building skin to fenestration, but not much articulation or pedestrian scale at the street level. In general, there is very little or no distinguishing characteristics for any commercial buildings that are indicative of locale or climate.

Landscape

Landscape materials for developed areas throughout the Downtown area, for both commercial and residential properties, generally include sod groundcovers and intermittent shade trees—mostly recent, small caliper (less than 4”), in a variety of species. The variety of grasses used for groundcover are generally manicured lawns, and require unusually high amounts of irrigation to thrive, given the low natural precipitation levels.

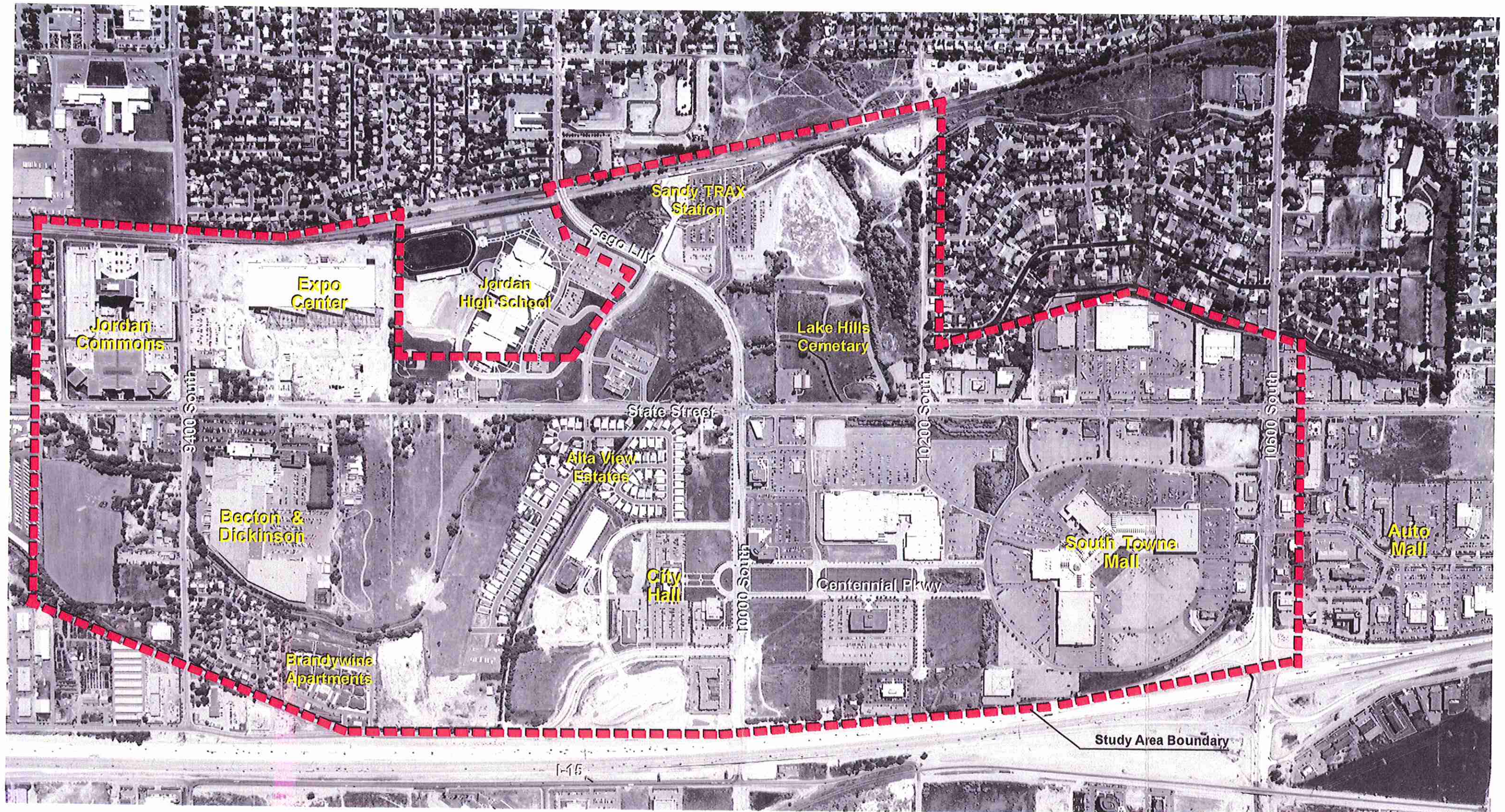
Existing Conditions

Infrastructure

Gas, electric, water, sewer and storm drain utilities are available throughout the downtown area, and high bandwidth telecommunications (phone and

cable) service is also available. Utility corridors generally follow street systems within the downtown area. Wireless telecommunication services are also available widely throughout the area.

Current Aerial Photograph (2000)



Existing Conditions

Overview of Illustrative Plan

Plan Objectives

The following Illustrative Plan is a general, visual description of possibilities for the development, infill and redevelopment of the Sandy Downtown area. The plan shows existing and proposed roads, buildings and open spaces, and is meant to suggest patterns and density of development rather than specific proposals for individual properties. Generally, the ideas presented here are intended to be developed under normal market conditions, and the plan does not suggest how or when such developments are to be undertaken. The plan is meant to provide guidelines for public and private development that will achieve these community goals:

- Provide efficient and expanded mobility options including automobiles, transit, pedestrians and bicycles
- Reduce travel demand on existing and new street system
- Integrate land uses with existing and proposed transit infrastructure
- Encourage economic growth and development
- Allow for a wide range of employment opportunities, and a broad stable economic base

- Expand housing choices, and provide additional affordable housing opportunities
- Preserve and expand open space and trails network
- Preserve and integrate existing neighborhoods
- Provide greater connectivity between activity centers
- Encourage expanded cultural and entertainment opportunities for local residents and employees

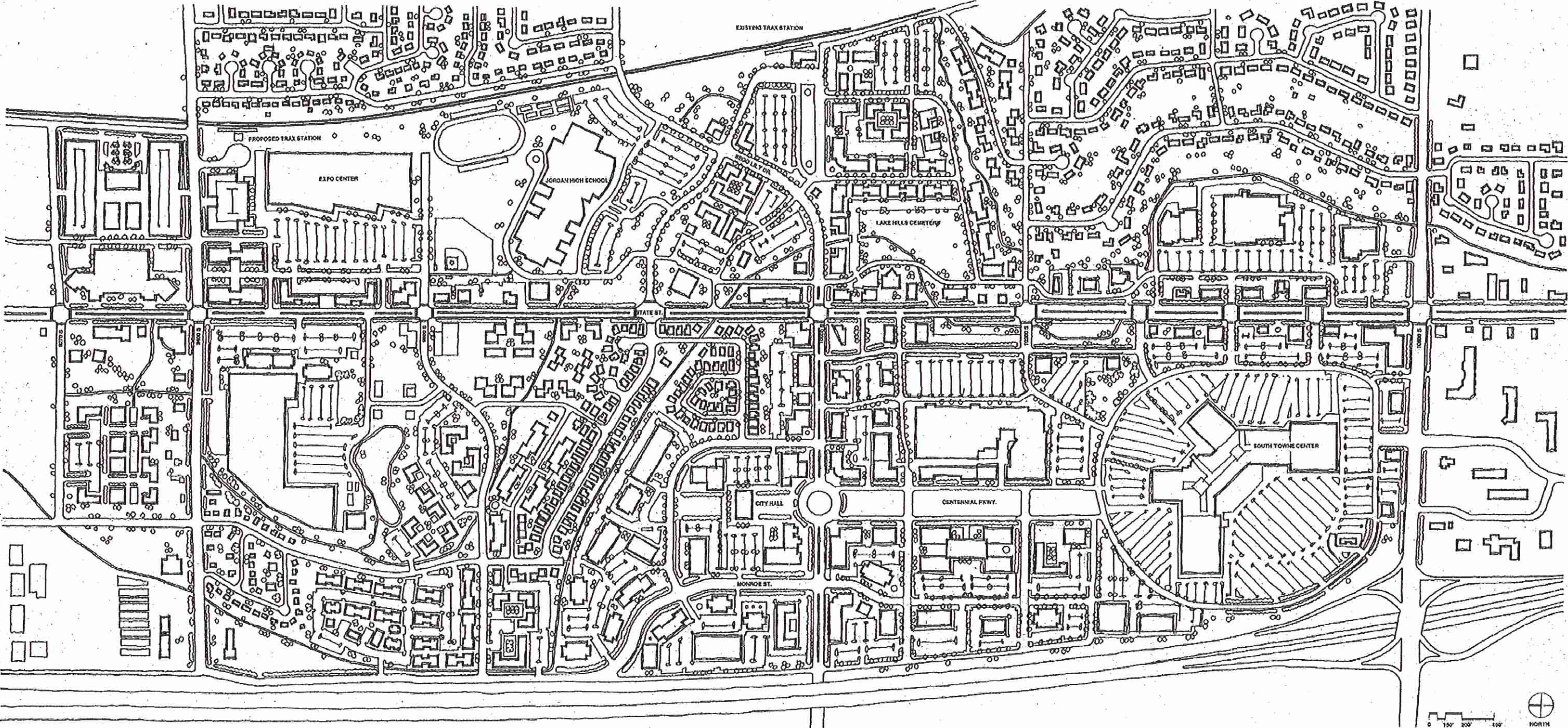
The purpose of the illustrative plan is to show a possible scenario of development if the recommendations and ideas of this master plan document, as described in the following section, are effectively implemented.

Timing for Implementation

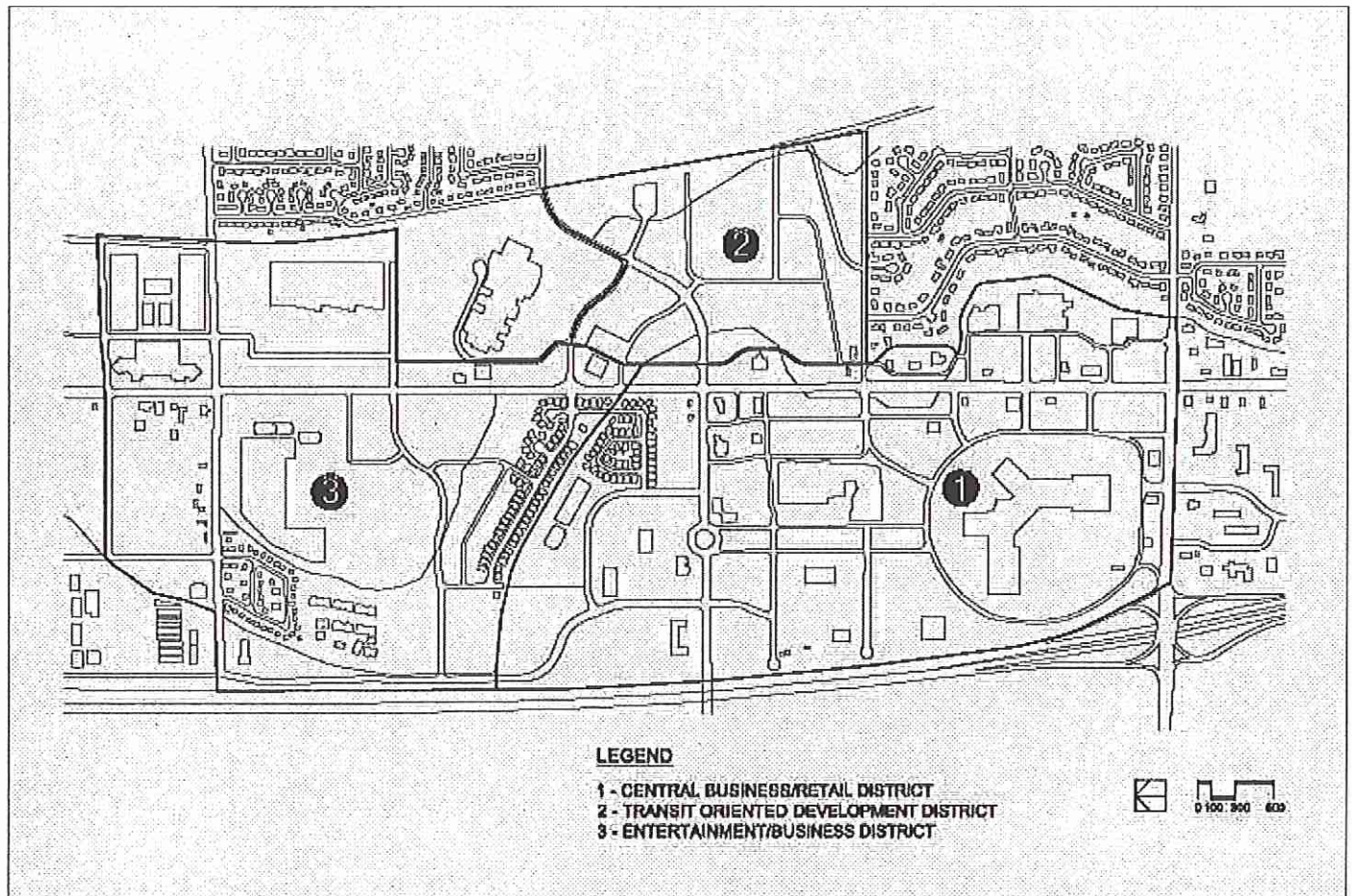
This is a long-range plan that illustrates a possible snapshot of the community at a twenty year horizon. Implementation of the ideas presented in this illustrative plan will require cooperation between many stakeholders, including residents, business owners, property owners, developers, and City staff and officials. Specific implementation strategies are included in the Implementation section of this document.

Illustrative Plan

Downtown Long-Term Plan



Overview of Districts



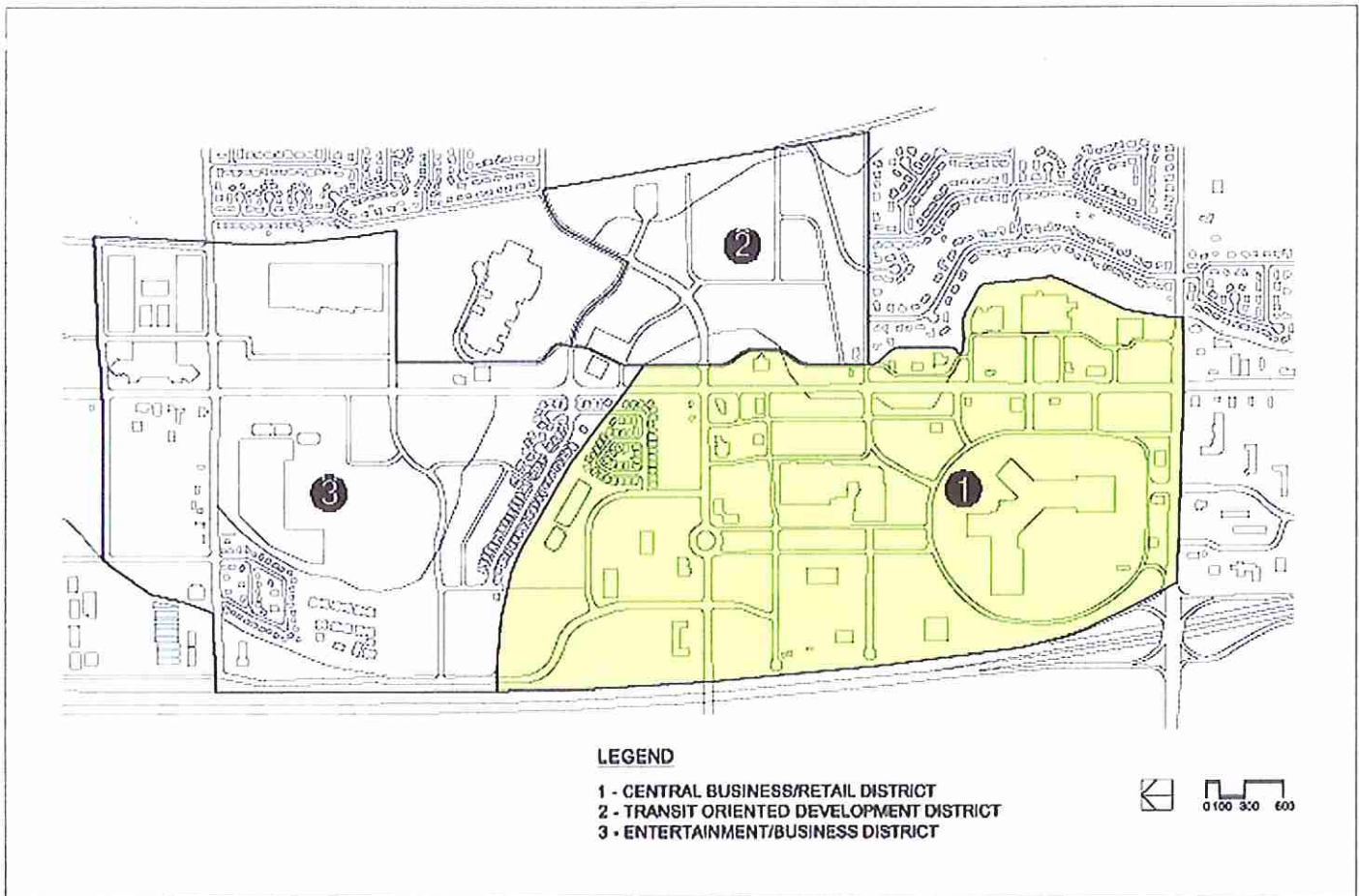
Downtown Districts Key Plan

A description of the Illustrative Plan follows. This description presents the plan in a framework of smaller Downtown Districts: Central Business/Retail District, Transit Oriented Development District, and Entertainment/Business District. These districts are delineated by natural features and are based on opportunities and constraints that provide unique characteristics for each.

Each district narrative includes an overview of opportunities and amenities, and a summary of proposed public and private development opportunities, land uses, and recommendations for actions to meet the overall plan objectives specific to each district.

Illustrative Plan

Central Business/Retail District



Central Business and Retail District Overview

The Central Business and Retail District is located at the south end of the Downtown, and is bounded by 10600 South to the south, I-15 to the west, the lower canal to the north, and includes a portion of the State Street commercial corridor from approximately 10000 to 10600 South.

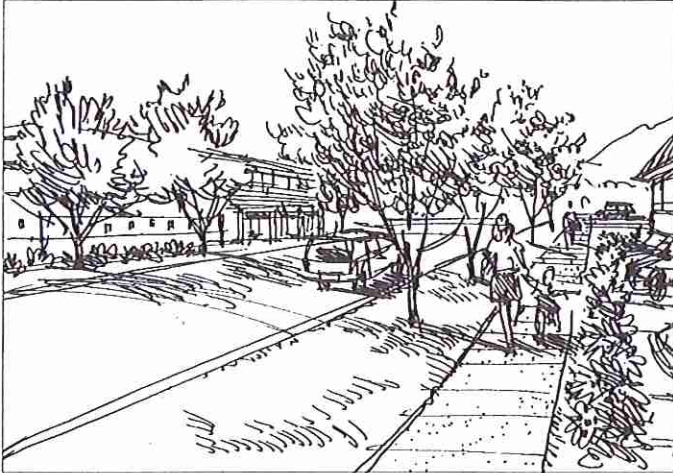
The Central Business and Retail District has many unique amenities that include the Sandy City Hall complex, Centennial Parkway and South Towne Mall. Although there appears to be a large amount of undeveloped land, much of what is currently vacant near Centennial Parkway and City Hall are sites that have already been planned and approved

by the City Council for development. Development potential exists mostly as infill in a few remaining unplanned parcels such as to the east of City Hall and a few vacant pad sites along State Street. Redevelopment potential exists for the Wal-Mart property on the east side of State Street, the former Cineplex Odeon complex, and possible long-term redevelopment of the South Towne Marketplace and portions of Alta View Estates. Following are specific recommendations for different functions or uses within this downtown district.

Commercial Retail

South Towne Mall and the surrounding regional retail centers are an important economic center for

Illustrative Plan



South Towne Mall Entry Corridor

the community, and significant portions of city revenue come from sales taxes from businesses in this area. The regional retail component should continue to be the primary land use at the south end of this district, with good access to I-15, State Street, and 10600 South. With new competition for regional shopping in South Jordan, Draper, and West Jordan, the focus must be on the overall shopping experience in order to retain the current market share and attract new customers. Over time, single story/single use buildings could be retrofitted or replaced with mixed-use developments that include retail and office or retail and residential uses that allow for expanded market opportunities and economic development without necessarily increasing traffic demand.



Mixed-use development at Centennial Parkway.

New retail development oriented toward Centennial Parkway will provide much needed activity to enliven what is potentially a wonderful civic space. The sidewalks that are now mostly vacant would benefit greatly from restaurants, cafés, small scale specialty shops, and personal services. Consideration should be given to requiring the ground floor of any new development on Centennial Parkway be this type of active use. Similar consideration should also be given to future developments along 10000 South, as well as other proposed arterial and collector streets.

Commercial Retail Recommendations:

- Encourage ground floor retail development—especially restaurants, cafés and specialty shops—along Centennial Parkway to enliven street fronts
- Encourage ground floor retail development along 10000 South and other proposed arterials and collectors throughout the district
- Retrofit or replace single use/single story retail developments throughout the district with better integrated and higher density mixed-use developments that include commercial office and/or residential uses on upper floors
- Create additional policies and strategies to improve overall shopping experience in order to retain and expand current market base
- Work with Economic Development Department to create incentive programs that will attract and retain a proportion of small, local businesses in all new retail developments.

Commercial Office

Existing and proposed commercial office space is mostly centered around Centennial Parkway, 10000 South and the City Hall complex. Existing office space is mostly auto-oriented, with little proximity

to and poor connections with downtown dining, shopping, and activity centers. Consideration should be given to including a mix of retail and/or residential uses with new office space, and at a minimum providing for street level retail in new office buildings. New buildings should also be located close to the street, with structured (preferable) or surface parking at the rear. Employers should be encouraged to offer transit ridership programs, and should provide changing facilities for bicyclists and pedestrians. A mix of business types and sizes will help provide a broad, stable economic and employment base.

Since many projects have already been planned and approved, a more concerted focus on remaining vacant parcels will be required. It is possible that the City can offer incentives and programs that will allow projects that have already been approved to incorporate some of these strategies.

Commercial Office Recommendations:

- Develop incentive programs to work with existing developers to incorporate illustrative plan strategies into projects that are already approved
- Encourage mixed-use development that includes retail and/or residential components within new commercial office developments.
- Encourage transit ridership programs for commuting employees
- Provide changing facilities and secure storage for bicycling employees

Residential

While it is unlikely that any new exclusively residential developments will occur in this district, it is highly advisable that housing opportunities be developed in the Central Business District. Housing

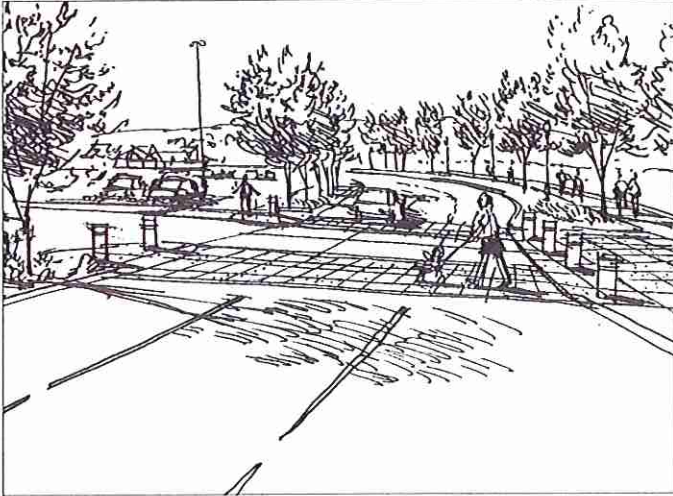
clustered around Centennial Parkway will add new character to the streetfront, and the activity generated by residents will extend the use of the park into the evening. The Centennial Parkway is a wonderful community asset that should be active and used beyond business hours, and for seasonal community events. New residents in the Central Business District will also increase the retail market without the additional travel demand on roads in a purely commercial zoning district.

Development of residential components in the Central Business District will likely require additional design standards beyond the scope of this document. A well crafted development code can also provide guidelines for residential amenities, access to services and open space, provisions for a mix of affordable housing, and other issues that are important to creating a viable downtown community.

Residential Recommendations:

- Develop program to require or provide incentives for residential development in the central business district
- Focus new central business district residential development around Centennial Parkway to increase evening activity and maximize the use of the valuable community resource
- Develop requirements for an appropriate mix of affordable housing convenient to service sector jobs in the retail market
- Encourage mixed-use of residential with compatible office and retail uses within the same structure or development
- Develop design guidelines specific to residential components in central business district
- Work with Economic Development Department to create incentives for attracting neighborhood services within the retail environment

Illustrative Plan

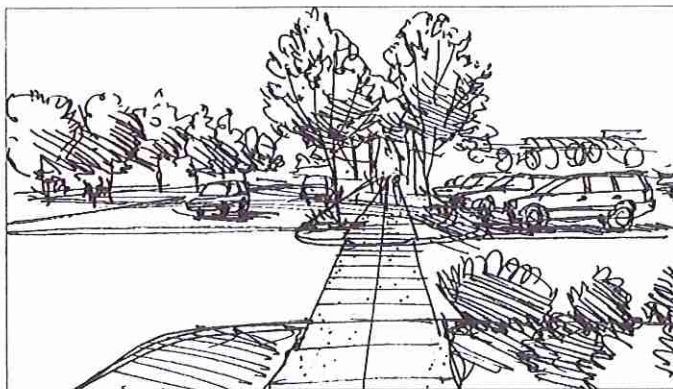


Parking drives can accommodate multi-modal use similar to streets.

Mobility

People are inherently active, and demand the ability to move about freely. Restrictions to our ability to get from place to place—be they traffic congestion, lack of mobility options, or safety concerns—tend to be upsetting and confining. One of the risks of creating an environment that focuses on a single mobility option is that it will eventually fail, and when that happens our quality of life suffers. A good mobility system includes two basic elements: conveyance options and a network of routes.

Conveyance options are plentiful, but the most common are: automobiles, mass transit, bicycles, and walking. Each of these mobility options has efficiency requirements, which are sometime in



New streets, such as this extension to Monroe, will improve connectivity and yield a more efficient transportation system.

direct conflict. Streets of unlimited width would be most efficient in supporting automobile conveyance, but are not good for bicycle and pedestrian crossing, and would be prohibitively expensive to construct and maintain, and would potentially have an adverse impact on private property rights. The objective of providing effective mobility choices is to find common denominators that support multiple options, and reduce potential conflict points.

In the central business district, there are many destinations, and therefore all modes of transportation will have to mix frequently. Roads and streets that accommodate automobiles, busses, bicycles and pedestrians are generally preferred over separate routes. Because of the potentially high volume of people moving into, around, and through this active district, generally the most efficient transportation systems long-term are those that reduce the impact of the automobile through trip management. Trip management can occur in several ways: through a mixed-use development pattern that reduces single-use trips, through an improved street network that offers greater route choices and reduces congestion, and through alternative short-trip options such as walking or using a shuttle system. Sustainable business districts utilize a small grid of streets and paths. Improving connectivity reduces the length of trips and can expand trip options.

The feasibility of adding a roundabout at the intersection of 10000 South and Centennial Parkway is good, as per the findings of a traffic analysis. This type of traffic intersection may help decrease some of the congestion and confusion associated with this intersection in its present configuration.

Mobility Recommendations:

- Address mobility impairments, including traffic congestion, limited transportation choice, and safety concerns

- Balance the exclusive use of automobiles with alternative mobility choices such as transit, shuttle system, bicycles and walking
- Develop a hierarchy of primary and secondary routes for conveyance systems: automobiles, transit, bicycles and pedestrians
- Plan and develop a more tight and connected network of streets, roads and paths
- Develop a broad, integrated approach for trip reduction and management through cooperation with employers, UTA and Public Works
- Encourage a mixed-use development pattern that will reduce single-use trips
- Reduce conflict points between automobiles and pedestrians, and automobiles and bicycles through appropriate street and intersection design modifications
- Explore options to install roundabout at intersection of 10000 South and Centennial Parkway based on positive findings and recommendation of traffic analysis.

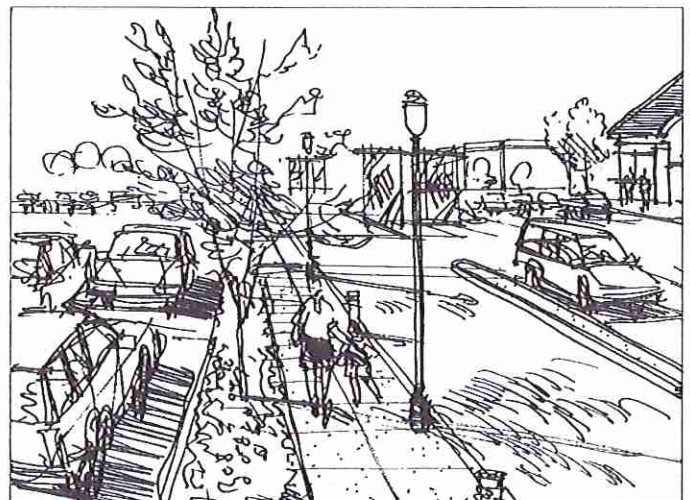
Parking

Sandy Downtown will continue to be a destination that is very auto-oriented, and convenient and accessible parking will be important. Opportunities exist to reduce the impacts of parking without reducing the availability of parking. An opportunity for minimizing parking impacts is to foster a more mixed-use approach to development patterns. Different types of uses that have different parking demands and peak use periods can in reality share parking facilities with no negative impact (see Schedule in Appendix A). Office space, for example has a peak demand during business hours, while retail and entertainment demands are in the evening hours. In fact, mixed-use type development can actually reduce travel demand since multiple trips (to the office, to the store, to the bank, etc.) can actually be accommodated in a single trip. It is important to note that this travel pattern is not

universal, and not *everyone* will reduce their travel patterns in this way. Many drivers, however, will consolidate trips and this will have a positive impact on travel demand.

In addition to consolidation and sharing of parking areas, consideration should be given to where parking facilities are located. In general, parking lots are expansive, and in many cases are not very attractive, although some property owners have taken great steps to provide landscaping and other beautification. And while there are many things that can be done to improve the appearance of these, locating them away from primary view and activity areas will create a more positive community image. Street frontages that consist of buildings rather than parking lots and driveways will naturally be much more active. And locating parking lots in the interior of blocks will also help facilitate the consolidation of parking districts as previously described. In this way, driveways can be consolidated as well to reduce the potential conflict points between automobiles and pedestrians.

Structured parking facilities can further reduce the ground area required for parking, and while this is generally a more expensive approach than surface parking, eventually the economic development potential for real estate will determine that such an



Parking areas can be more attractive and functional with improvements such landscaping and continuous drive lanes such as in this circulator.

Illustrative Plan

approach is cost-effective. In any event, long-range planning for transitioning from surface to structured parking should be considered for any new development. And adjacent developments with different parking demands may help justify the cost for such an improvement much sooner. There are many programs that urban communities have undertaken to help finance parking structures and improve their communities, such as special improvement districts, redevelopment projects, and revenue bonds.

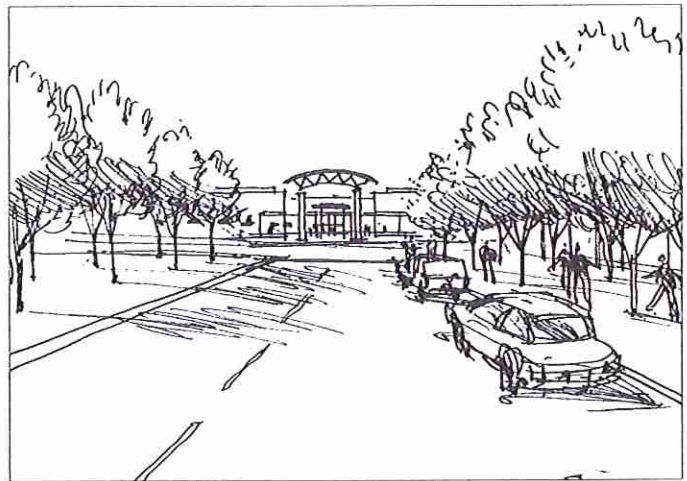
The character of and materials used for parking facilities can have a significant impact on human comfort. Unshaded expanses of asphalt, which are dark in color and absorb heat, can actually raise the ambient air temperature by as much as 10 to 15 degrees. Providing shading or light colored paving materials such as concrete have a positive impact on human comfort, and results in a much more pleasant experience. Shade trees and landscaping used throughout parking lots can improve the appearance of these areas, help reduce surface temperatures in the summer, and improve air quality.

Parking Recommendations:

- Provide adequate parking to serve existing and new public and private developments
- Encourage mixed-use developments that can use the same parking for different peak demands, and reduce the overall parking requirement
- Consolidate parking into shared parking districts, and consider special improvement districts to maintain landscaping and appearance of parking areas
- Locate parking at the sides and rear of buildings, and at block interiors
- Consolidate driveways to reduce curb cuts, traffic impacts, and potential conflicts with pedestrians

- Create incentives and financing partnerships to facilitate construction of structured parking facilities
- Develop long-term strategies for existing and proposed developments to consider the eventual redevelopment of surface parking lots
- Provide landscaping, especially shade trees—in existing and new parking lots to upgrade their appearance, improve air quality, and create a more pleasant environment

Open Space



Landscaping and streetscape can help define the terminus of Centennial Parkway at the south end.

The two public open space elements within the Central Business/Retail District include the Centennial Parkway, and Neff's Grove. These two park areas are very different in size, amenities, and character. Both have the potential to be wonderful community resources through careful planning and design.

The Centennial Parkway is a monumental civic space, and deserves considerable attention to make the most of its impressive scale. Functionally, the parkway is broken by cross streets, but visually, it is one continuous space from the mall to City Hall. The City Hall is a good terminus to the visual



Streetfront activities such as dining and shopping along Centennial Parkway will help enliven the public space.

corridor at the north end, and open space, landscaping, and streetscape can help define the south terminus. Defining the edges of the corridor can occur with proper development patterns and appropriate landscaping. Buildings should be set up to the roadway on either side of the street to frame the space, and landscaping that may mature more rapidly than building development will occur can help. This public space should be activated, and full of people at all times of the day and through all seasons. It will take time to achieve this goal, but careful planning with appropriate uses, a mix of office, retail and residential elements, and more seasonal community events will help. The Fourth of July and the Scarecrow Festival are wonderful community events for this space. Additional events such as art and music festivals, markets, outdoor concerts, ice skating, and other types of seasonal events should occur at least once during each season to provide regular activity stimulants. Small scaled facilities and amenities for these events should be provided, and careful attention should be given to locating these so that they do not adversely impact the park.

Neff's Grove is a more intimate space that with attention and careful design could be a wonderful,

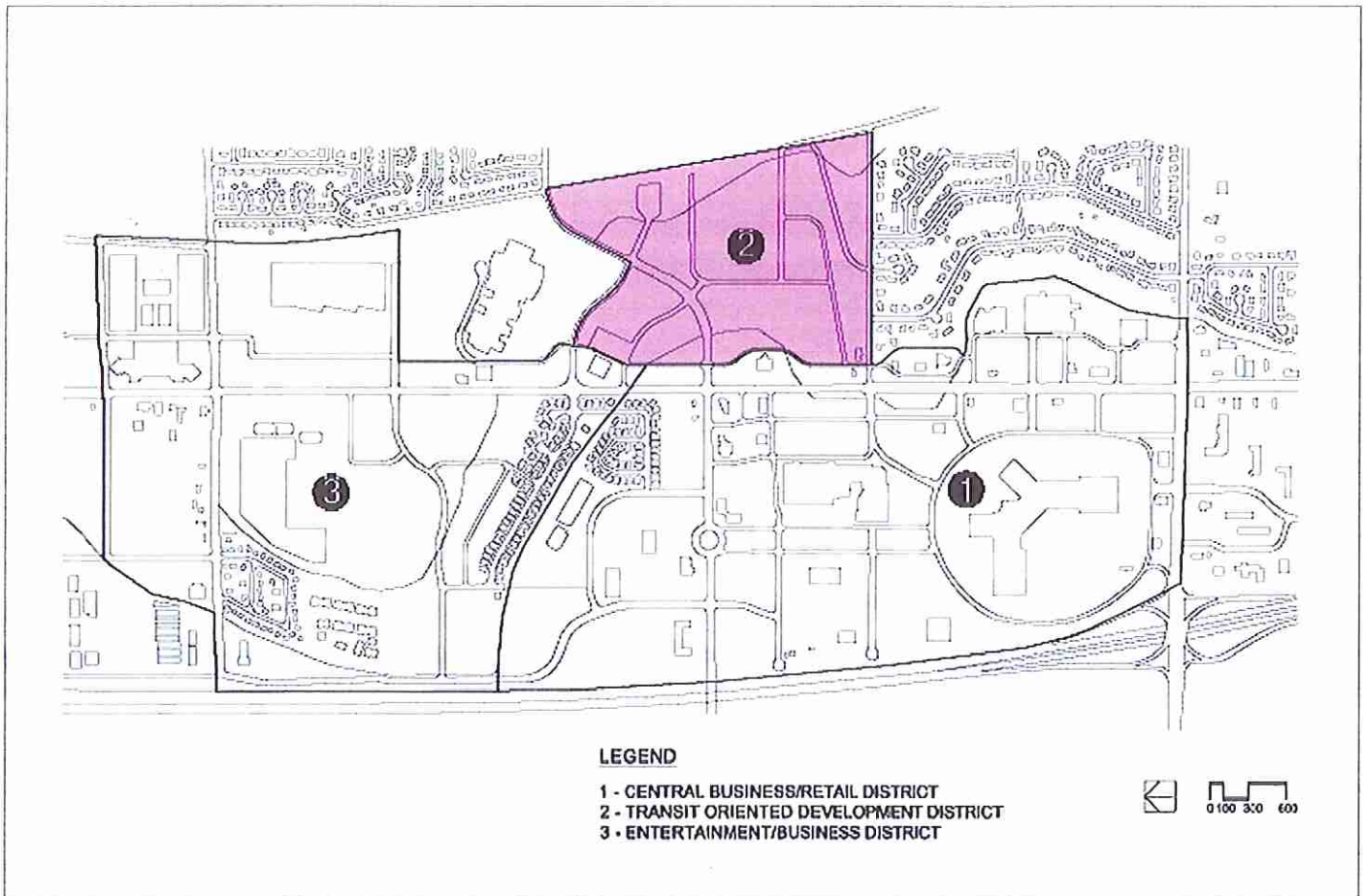
tranquil park. Although currently in a somewhat neglected state, this small pocket park with its large shade trees and wooded character can be a wonderful refuge in an urban environment. It should be tailored to small group or individual activities, with sitting areas, public art, historical markers, and possible further development of water features.

Open Space Recommendations:

- Further develop City Hall as a formal terminus for Centennial Parkway
- Develop the south terminus of the Parkway as expansion and development occurs at South Town Mall—the terminus should be located closer to the physical park rather than across the parking lot
- Provide shade trees and additional landscaping to better define the perimeter of the Parkway, and to create places for seating and event staging
- Expand seasonal events to include one or two activities during each season
- Frame the outside perimeter of parkway streets with mixed-use development (residential, restaurants, and specialty retail) that activates the space and promotes extended daytime and evening use
- Locate support facilities such as public rest rooms, vendors, and staging areas at the perimeter to not detract from the monumentality of the space
- Clean up the Neff's Grove area
- Provide intimate seating and small group gathering spaces in Neff's Grove
- Add a water feature at Neff's Grove that will contribute to a more intimate, active setting
- Utilize a community-based public art program to provide appropriately scaled art throughout all public park spaces.

Illustrative Plan

Transit Oriented Development District



Transit Oriented Development District

The Transit Oriented Development District is located to the east of the Central Business and Retail District. It is bounded by 10200 South to the south, the State Street commercial corridor to the west, the Beetdigger and Sego Lily Drive to the north, and the TRAX light rail corridor to the east.

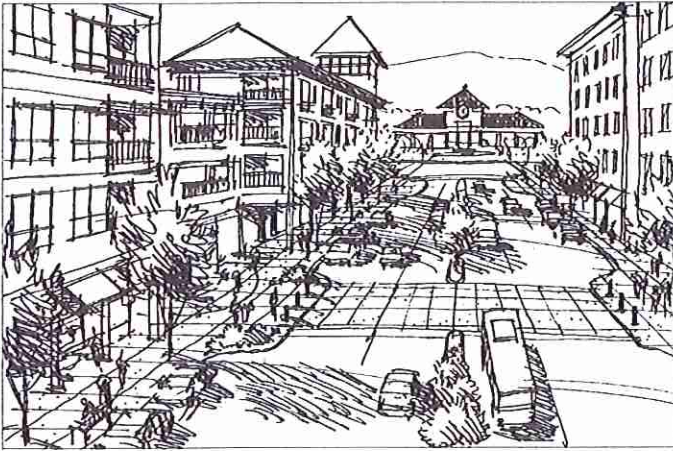
The Transit Oriented Development District has many unique characteristics that include the TRAX light rail station, which is the present terminus of the line, two canals and the Dry Creek Parkway corridor, and proximity to parks and existing residential neighborhoods. Much of the land is undeveloped with the exception of the UTA Park & Ride facilities that surround the light rail station. Follow-

ing are specific recommendations for different functions or uses within this downtown district.

Commercial Retail

This district is potentially very different from the retail character around South Towne Mall in that the transit oriented development pattern is less oriented toward private vehicles, and more oriented toward pedestrians. The density of mixed-use retail, office, and residential uses in close proximity have the potential to create a vibrant village atmosphere. Retail development should focus more on small-scale specialty stores and neighborhood shopping and personal services.

Illustrative Plan



Transit-oriented development along 10000 South, with the transit hub as the terminus to a strong visual axis.

New retail development oriented toward 10000 South will be a continuation from the Central Business and Retail District. Ground level active retail activate the sidewalks that are now mostly vacant. Consideration should be given to requiring the ground floor of new developments to include this type of active use.

Commercial Retail Recommendations:

- Encourage ground floor retail development—especially restaurants, cafés and specialty shops—along 10000 South to enliven street fronts
- Work with Economic Development Department to create incentive programs that will attract and retain a proportion of small, local businesses in all new retail developments.

Commercial Office

New commercial office space should be located close to the light rail station, within 1/4 mile or less, to facilitate commuter transit use. As a major rail and bus hub, this station will allow greater commuting options. Studies have shown that employment centers located within easy walking distance of a transit node will see as much as 10% to 15% of

commuters using mass transit as their primary transportation. This can have a dramatic impact on economic expansion while managing the traffic demand on roadways. The potential for residences nearby may further reduce the travel demand. Consideration should be given to including a mix of retail and/or residential uses with new office space, and at a minimum providing for street level retail in new office buildings. New buildings should also be located close to the street, with structured (preferable) or surface parking at the rear. Employers should be encouraged to offer transit ridership programs, and should provide changing facilities for bicyclists and pedestrians. A mix of business types and sizes will help provide a broad, stable economic and employment base.

Commercial Office Recommendations:

- Locate commercial office space within easy walking distance—1/4 mile or less—from the transit hub
- Encourage mixed-use development that includes retail and/or residential components within new commercial office developments.
- Encourage transit ridership programs for commuting employees
- Provide changing facilities and secure storage for bicycling employees

Residential

The housing market in this area, which has for many years been focused primarily on single family residences, is expanding to accommodate a dramatic increase in housing needs for an aging population. The Transit Oriented Development District offers an opportunity for a neighborhood, within walking distance to the mass transit hub as well as neighborhood retail and services.



Mixed-use development patterns in the Transit Oriented Development District can integrate retail, commercial and residential uses.

Residences clustered around the light rail station will preferably be of a greater density than those at the periphery, especially along 10200 South where transition to a low-density, single-family subdivision is important. Much of the residential development in this district will be exclusive residential development. It is possible, however, to integrate housing in with office and retail development consistent with mixed-use development patterns in other successful transit oriented communities.

Development of residential components in the Transit Oriented Development District will likely require additional design standards beyond the scope of this document. A well-crafted development code can also provide guidelines for residential amenities, access to services and open space, provisions for a mix of affordable housing, security provisions, and other issues that are important to creating a viable downtown community.

Residential Recommendations:

- Buffer existing adjacent neighborhoods from more intensive uses around the TRAX station
- Develop housing in a way that is convenient and accessible to downtown employment centers and public transit

- Allow mixed-use of residential with compatible office and retail uses within the same structure or development
- Develop design guidelines specific to residential components in the Transit Oriented Development District
- Work with Economic Development Department to create incentives for attracting neighborhood services within the retail environment

Mobility

The transit-oriented environment is a wonderful example of expanding mobility options. While not everyone feels complete mobility freedom without their own automobile, there are many people in the community that have lifestyles compatible with much higher transit and pedestrian alternatives. A young couple, for example, with very limited income could live near a transit station and live very comfortably with only one car. An aging resident who may not feel safe driving on the roads may be very comfortable walking to a nearby neighborhood shopping center, or using the light rail system to travel to cultural venues outside of the community. A young professional who is single may enjoy living within walking distance to his or her office, and take advantage of the extra time not spent



Senior housing with pedestrian access to transit and services is an important market in the evolving community.

Illustrative Plan

commuting on personal interests or involved in the community.

While this environment is inherently more oriented toward transit and pedestrian mobility, it still must provide efficient movement of automobile transportation. One of the recommendations included in the plan is to realign 10000 South to provide a direct connection to the transit hub, while accommodating the traffic along Sego Lily Drive with a tee-intersection. This will accomplish several objectives. First, a signalized intersection is a much more viable mechanism for decreasing potential auto-pedestrian conflicts by providing a safe street crossing. Second, the direct connection from the Central Business and Retail District to the hub will facilitate much more efficient bus transit, automobile, and pedestrian connections to this important destination. Third, the realignment reinforces that Sego Lily drive is a residential street and not a major arterial. And fourth, it provides a strong visual link along a major downtown street.

Another important connection in this area is an extension of 10200 South east to the light rail corridor. The City should continue to pursue an option for a roadway that runs south, parallel and to the west of the light rail corridor, down to 10600 South. This connection would improve access from the transit hub location to State Street and 10600 South, and will help provide access to the neighborhood above the cemetery.

In addition to being a major transit hub, this district provides important connections between existing and proposed trail systems that can provide greater connectivity to the community for a variety of uses. The Dimple Dell Parkway trail is an important regional trail system that will eventually connect Sandy to the entire region via the Bonneville Shoreline and Jordan River Parkway trail systems. A grade separated crossing at the rail corridor is important to direct access of the Parkway, in addition

to the rail crossing at the TRAX station. By more effectively using the canal system and the light rail line as trail corridor, greater local and community-wide connections can be created for a variety of uses. Existing service road rights-of-way can be utilized to create a multi-use trail system that is both safe and efficient. These trails pass very near schools, and can be used by children as an alternative to walking or riding on busy streets. Bicycle commuting is viable in many neighboring cities, and these local trails which pass very near major downtown employment centers are likely to be used for commuting as well.

Mobility Recommendations:

- Provide greater access to transit and shuttle systems for those who have limited access to automobile—either by choice or by life stage
- Manage conflicts between automobiles and pedestrians through improved street and intersection design, recognizing that pedestrian traffic increases in close proximity to a transit hub
- Improve the light rail access road and Sego Lily/10000 South and explore a more direct visual and pedestrian link from downtown employment centers to the TRAX station
- Extend 10200 South east to the light rail corridor, and provide a connection to 10600 on the South
- Plan and develop a more tight and connected network of streets, roads and paths
- Design intersections for safe pedestrian crossings
- Encourage a mixed-use development pattern that maximizes transit system use
- Provide a grade-separated crossing for the Dimple Dell Parkway trail at the light rail corridor
- Develop an effective community trail system using the existing service road right-of-way along the irrigation canals

Parking

While parking demand may be somewhat decreased because of the intense transit and pedestrian activity within a 1/2 mile radius of the light rail station, this district will continue to be a destination that must accommodate private vehicles safely and efficiently, and parking will be required. Opportunities exist to reduce the impacts of parking without reducing the availability of parking. One of the greatest opportunities for minimizing parking impacts is to foster a more mixed-use approach to development patterns. Different types of uses that have different parking demands and peak use periods can in reality share parking facilities with no negative impact (see Schedule in Appendix A).

In addition to consolidation and sharing of parking areas, consideration should be given to location of parking facilities. The sloping topography of this district affords an excellent opportunity to locate parking partially below grade, especially for residences. Street frontages that consist of buildings rather than parking lots and driveways will be much more active. Other locations for parking lots include the interiors of blocks, which will also help facilitate the consolidation of parking districts. In this way, driveways can be consolidated as well to reduce the potential conflict points between automobiles and pedestrians. Structured parking should also be considered where funding capabilities and land values justify such a measure.

Parking facilities at the TRAX station are required to facilitate use of the transit system. Currently, nearly two thirds of transit users who park in the lots are not local traffic, but are coming from remote destinations further to the south. As the light rail system is expanded and extended to Draper, there may be some decrease in the demand for parking facilities near this station. Development that is transit oriented is a more efficient and effective use of the area around the transit station, and in

the future, structured parking facilities can be utilized to accommodate parking demand, and facilitate pedestrian access by local residents and commuters. Separating parking for light rail usage from other significant uses in the transit district will be challenging. It is important that commercial parking remain available for patrons and employees, many of whom will not be transit users.

The character of and materials used for parking facilities can have a significant impact on human comfort. Shade trees and landscaping used throughout parking lots can improve the appearance of these areas, help reduce surface temperatures in the summer, and improve air quality.

Parking Recommendations:

- Provide adequate parking to serve new public and private developments
- Encourage mixed-use developments that can use the same parking for different peak demands, and reduce the overall parking requirement
- Consolidate parking into shared parking districts, and consider special improvement districts to maintain landscaping and appearance of parking areas
- Locate parking at the sides and rear of buildings, and at block interiors
- Consolidate driveways to reduce curb cuts, traffic impacts, and potential conflicts with pedestrians
- Modify Park & Ride facilities and redevelop surface parking lots with structured parking to accommodate existing parking needs and facilitate better pedestrian access from new transit oriented developments
- Provide landscaping, especially shade trees—in existing and new parking lots to upgrade their appearance, improve air quality, and create a more pleasant environment

Illustrative Plan

Open Space

There are several open space amenities within the Transit Oriented Development District that include the Dimple Dell Trail, parks east of the light rail corridor, the Lake Hills Cemetery, and Jordan High School playing fields. These public spaces are all very different in size, amenities, and character, but all have the potential to be wonderful community resources through careful planning and design.

The Dimple Dell Regional Park is an important recreational venue for the entire Sandy community. It is extensive, and also connects to other regional trails and open space networks. The trail is scenic, and can be developed with trails to facilitate a variety of uses.

Lake Hills Cemetery, although private, has wonderful visual qualities. While it is not a place for recreational activity, the policy of no raised head-

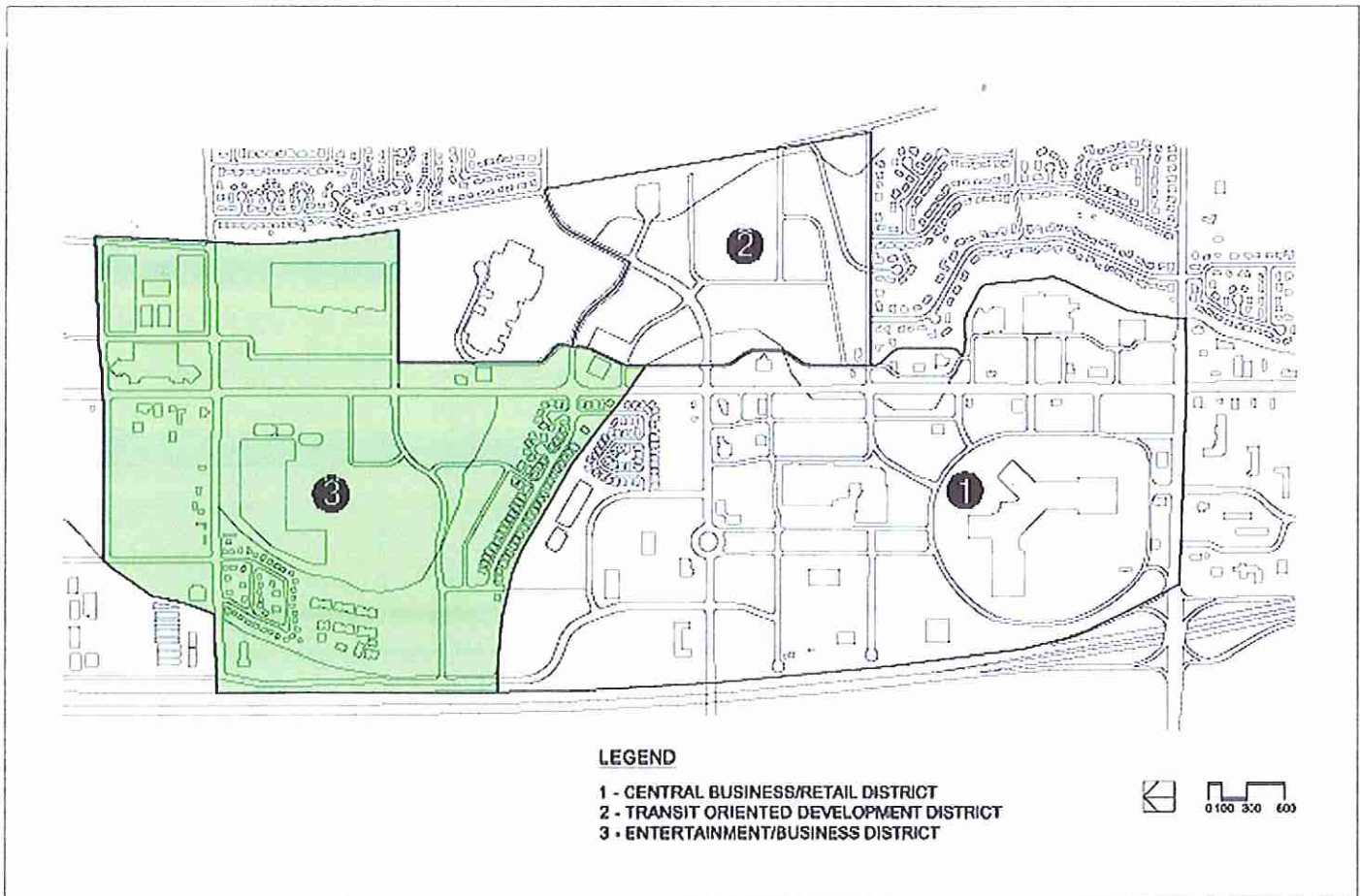
stone makes it appear open and attractive. Certain uses such as walking, strolling, jogging, and visiting are appropriate and welcome.

The Jordan High School fields, although not always accessible, provide a feeling of openness that is an important contrast to the surrounding urbanized community. It provides a venue for a variety of sporting events and family activities.

Open Space Recommendations:

- Provide trails and connections to Dimple Dell Regional Park to take full advantage of its many recreational uses
- Utilize a community-based public art program to provide appropriately scaled art throughout all public park spaces
- Preserve the attractive environment and visual access to the Lake Hills Cemetery
- Utilize the asset of the High School as a community recreational resource

Entertainment/Business District



Entertainment/Business District

The Entertainment/Business District is located at the north end of the Downtown area. It is bounded by the lower canal to the south, I-15 and Monroe Street frontage road to the west, the 9270 South corridor to the north, and the TRAX light rail corridor to the east and Jordan High School property to the east.

The Entertainment/Business District has many unique elements and characteristics that include the South Towne Exposition Center, Jordan Commons, two canals, existing residences, and the Beckton & Dickinson manufacturing facility. Much of the land is still undeveloped at the northwest corner of the 9400 South/State Street intersection, and along the

top of the ridge above the canals. Following are specific recommendations for different functions or uses within this downtown district.

Commercial Retail

This district has an emerging retail character that is closely tied to the entertainment and leisure activity environment of Jordan Commons and the Expo Center. There are several recently opened restaurants along State Street and in Jordan Commons that have been very successful, in addition to a traditional favorite, Joanna's Kitchen.

New retail development oriented toward State Street and 9400 South may include specialty shops, additional restaurants and dining establishments,

Illustrative Plan

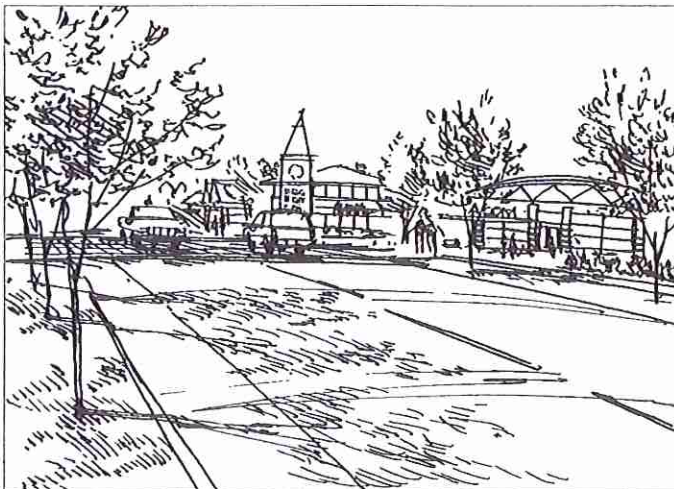
and business services oriented toward the growing employment base in this district, as well as spin-off services catering to the Expo Center, and possibly a small hotel district. Retail developments will likely be very different in scale and character than the lower areas of downtown, with single-story, single-use retail development much more likely.

Commercial Retail Recommendations:

- Create more intensive retail activity along 9400 South, in a pedestrian oriented environment generated by walking traffic between Jordan Commons to the Expo Center
- Encourage spin-off business that cater to the leisure and entertainment market
- Work with the Economic Development Department to establish possible business incubator programs in this highly visible and accessible but less intensive business district

Commercial Office

The vacant property in the northwest corner of the 9400 South/State Street intersection could be a viable location for a new business park or corporate campus. The presence of the Becton & Dickinson facility across 9400 South may suggest businesses



Intimately scaled office and retail development along 9400 South.

in the technology sector, which could benefit from spin-off services that might locate nearby a technology and electronics marketplace. This would also expand the economic base from financial and institutional services commerce located in the Central Business and Retail District.

The potential of a light rail station at 9400 South may suggest more intense development of office space near the TRAX corridor. Other employment centers further to the west could easily be served by a circulating shuttle system from the light rail station.

Commercial Office Recommendations:

- Develop business/technology center on north side of 9400 South, west of State Street.
- Encourage small spin-off support services for the expanded employment center
- Encourage transit ridership programs for commuting employees, and develop a shuttle system to expand connections to the proposed light rail station at 9400 South.
- Provide changing facilities and secure storage for bicycling employees

Residential

The existing housing in this district, which is primarily single-family residences to the west and south, can be expanded to offer a greater choice in housing, and especially to expand the senior housing market that exists at the Alta View Estates neighborhood. Additional, undeveloped land further up the hillside can be developed with higher density housing for seniors that might also include amenities such as senior activity center, meeting space, and perhaps assisted living facilities.

Residences clustered around the light rail station are less likely because housing is less compatible with

facilities such as the Expo Center. Much of the residential development in this district will be exclusive residential development. It is possible, however, to integrate housing in with office and retail along the ridge at the south end of the district.

Development of residential components in this district will likely require additional design standards beyond the scope of this document. A well-crafted development code can also provide guidelines for residential amenities, access to services and open space, provisions for a mix of affordable housing, security provisions, and other issues that are important to creating a viable downtown community.

Residential Recommendations:

- Develop guidelines for an appropriate mix of quality, affordable housing convenient to manufacturing and technology employment centers
- Encourage mixed-use of residential with compatible office and retail uses within the same structure or development
- Develop design guidelines specific to residential components in the Entertainment/Business District
- Encourage the development of additional senior housing developments that include amenities such as an activity center, medical services, cultural opportunities, and possible assisted living services

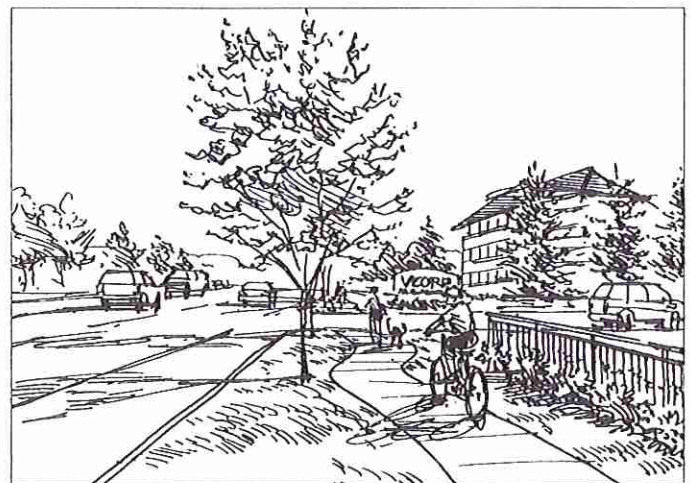
Mobility

9400 South has in the past been an important thoroughfare, but with new developments such as Jordan Commons and the Expo Center it must cater to a more pedestrian oriented atmosphere. The potential of a new transit station at 9400 South may help reduce some of the traffic associated with these

entertainment and leisure venues. A more intimate streetscape, and on-street parking will help calm traffic to allow safer street crossings and a sense of arrival to an important destination. Prior to development of a new light rail station, the light rail trail system, currently under construction, should be more fully developed and utilized. This trail could be developed to connect to 9400 South from both 9000 and 10000 South stations.

This district provides a continuation of the canal trail systems that can provide greater connectivity to the community for a variety of uses. A grade separated crossing of the upper canal trail at State Street will provide a safer environment for children and recreational users. The natural topography of the hillside will facilitate a relatively easy bridge crossing without the need for extensive ramp systems that are deterrents to safe pedestrian crossing. In addition to the trail crossing, pedestrian connections at major intersections of 9800 South State, 9600 South State and 9400 South State Street will provide additional crossings for pedestrians at major activity centers.

The light rail system is an important option for entertainment use. Currently the stations at 9000 South and 10000 South are too remote to adequately accommodate pedestrians to and from the Expo



Mobility options include accommodating cars, pedestrian, and bicycles, such as this State Street corridor near 9800 South.

Illustrative Plan

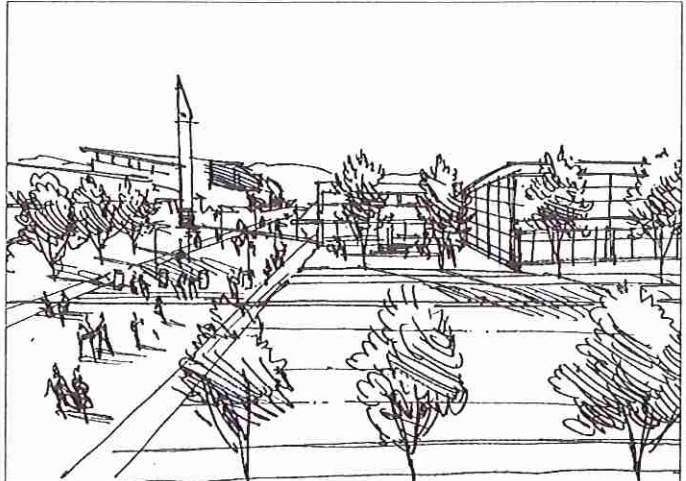
Center. With weekend events that have attracted up to 30,000 participants, there is a tremendous opportunity to reduce automobile and shuttle traffic by locating a station on the Expo Center site, with a high probability of utilization. A Kiss & Ride facility and bicycle station at this hub would also alleviate congestion at other Sandy TRAX stations. Funding of a station at 9400 would probably require significant community participation from City and County. This recommendation should be given further study.

Mobility Recommendations:

- Modify the character of 9400 South to facilitate pedestrian crossings between the Expo Center and Jordan Commons, and to create more intimately scaled street and additional parking
- Manage conflicts between automobiles and pedestrians by exploring a grade separated crossing of State Street for trails, and providing regular signalized grade crossings at near major activity zones.
- Improve connectivity of streets and paths.
- Evaluate the addition of a light rail station and shuttle at the Expo Center, and facilitate event ridership to reduce travel demand
- Encourage a mixed-use development pattern that maximizes transit system use
- Develop an effective community trail system using the existing service road right of way along the irrigation canals.

Parking

While parking demand may be somewhat decreased because of the intense transit and pedestrian activity, this district will continue to be a destination that must accommodate private vehicles safely and efficiently, and parking will be required. The Expo Center does not have sufficient parking to meet the



Structured parking facilities at the Expo Center will facilitate much more efficient use land and alleviate parking deficiencies.

needs for large events, and the demand for parking space is tremendous. Currently, vacant properties across State Street are being utilized, but as these areas are developed, readily available parking will decrease. The Jordan Commons facility has carried some of the burden for this parking demand, but its peak demand periods are often the same as the Expo Center, especially for weekend events. Consideration may be given to utilizing controlled access parking for Jordan Common patrons. A validation from Commons stores and restaurants would allow free parking, while others would pay to park.

Consideration should be given to developing structured parking facilities for the Expo Center, in a way that will not obscure the present facility. The large surface lot is not an efficient use of the space, especially with the tremendous demand for parking that exists. Small retail shops could flank these structures along State Street to minimize their visual impact.

Opportunities exist to reduce the impacts of parking without reducing the availability of parking. One of the greatest opportunities for minimizing parking impacts is to foster a more mixed-use approach to development patterns. Different types of uses that have different parking demands and peak use periods can in reality share parking facilities with

no negative impact. Additional office space, for example, would facilitate the development of additional parking facilities, which could be used for heavy weekend and evening event demand, at times when the office parking demand is minimal (see Schedule in Appendix A).

In addition to consolidation and sharing of parking areas, consideration should be given to where parking facilities are located. The sloping topography at the south end of this district affords an excellent opportunity to locate parking partially below grade, especially for residences. Street frontages that consist of buildings rather than parking lots and driveways will naturally be much more active and attractive. Other locations for parking lots include in the interior of blocks, which will also help facilitate the consolidation of parking districts. In this way, driveways can be consolidated as well to reduce the potential conflict points between automobiles and pedestrians.

The character of and materials used for parking facilities can have a significant impact on human comfort. Shade trees and landscaping used throughout parking lots can improve the appearance of these areas, help reduce surface temperatures in the summer, and improve air quality.

Parking Recommendations:

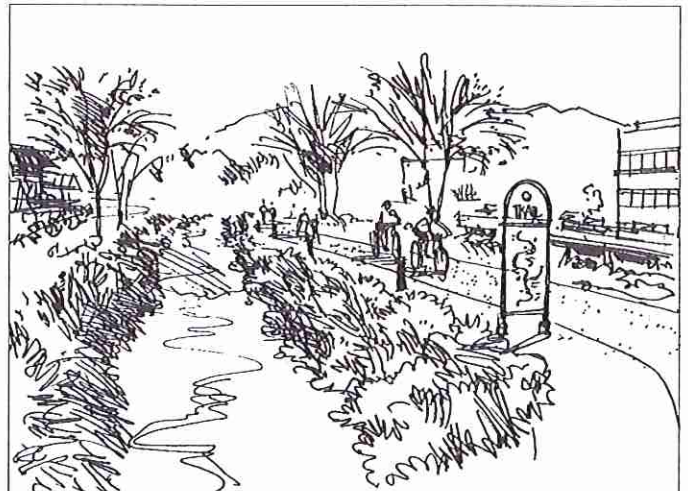
- Provide additional low profile structured parking to serve new public and private developments, especially event parking at the Expo Center
- Encourage mixed-use developments that can use the same parking for different peak demands, and reduce the overall parking requirement
- Consolidate parking into shared parking districts, and consider special improvement districts to maintain landscaping and appearance of parking areas

- Locate parking at the sides and rear of buildings, and at block interiors
- Consolidate driveways to reduce curb cuts, traffic impacts, and potential conflicts with pedestrians
- Modify the character of 9400 South, and develop additional on-street parking
- Provide landscaping, especially shade trees—in existing and new parking lots to upgrade their appearance, improve air quality, and create a more pleasant environment

Open Space

There are several open space amenities within the Entertainment/Business District that include the canal trails, private parks in the Becton and Dickinson complex, and playing fields at the middle school just east of Jordan Commons. These public spaces are all very different in size, amenities, and character, but all have the potential to be wonderful community resources through careful planning and design.

The canal trails are an important resource not only for mobility, but for recreation. Resting and sitting stations along the trail, especially at strategic scenic locations such as along the top of the ridge, would



Efficient use of the canal corridors for trails and connections is an important way to link open spaces together.

Illustrative Plan

provide a greater sense and appreciation of community. Informational and interpretive signs, indicating important landmarks or locations visible in the region would help educate and inform users about broader community issues, such as water conservation, air quality, sprawl, and other environmental concerns.

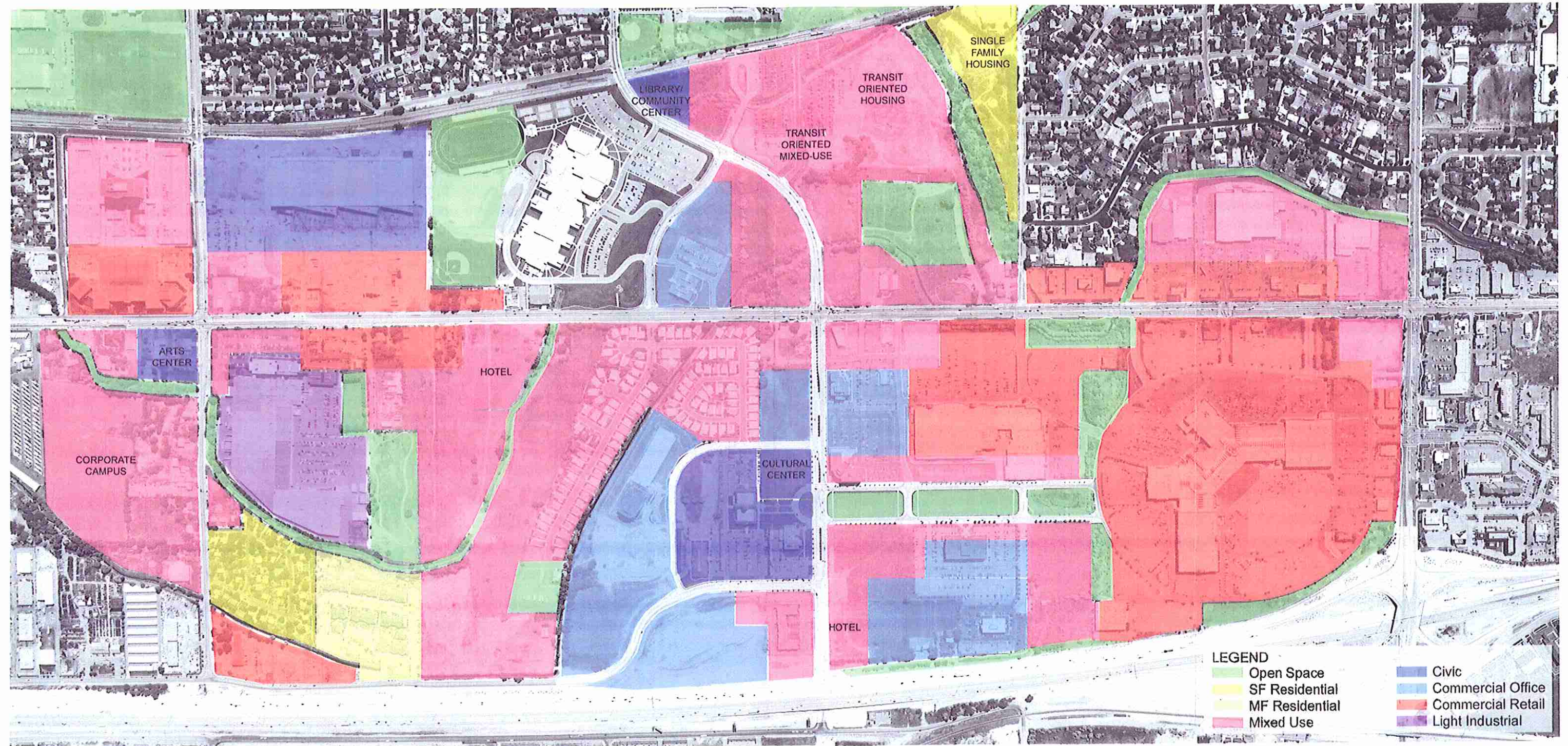
Beckton & Dickinson has provided a track and park area for employees that can serve as a model for other employment centers and campuses. Providing an outdoor space for employees to dine, exercise, or take a break is an important commodity to productivity, and a great incentive to attract and retain employees. A well kept private park can improve the appearance and vitality of a site.

The Mount Jordan Middle School fields, although not always accessible, provide a feeling of openness that is an important contrast to the surrounding developed community. It provides a venue for a variety of sporting events and family activities.

Open Space Recommendations:

- Provide multi-use trails using the existing canal system right of way
- Provide information to recreationists
- Utilize a community-based public art program to provide appropriately scaled art throughout all public park spaces
- Encourage the development of private parks in large, campus-like developments
- Utilize the assets of the Middle School and High School as an community recreational resource

Proposed Land Use Regulating Map



Overview

Mobility Options

Mobility and access to efficient transportation systems is important to quality of life, safety, and stability of a community. Important issues include what conveyance systems will be utilized, and how efficient do these systems operate. Basic conveyance systems include: private vehicles, mass transit, bicycles and walking. What's more, the most efficient use of these systems are sometime in direct conflict. It is important to balance systems and provide options and choice. When one system is inherently dominant to the exclusion of other, the entire system will eventually fail.

Three important areas that are presented here include: street networks, transit access, and trails networks. Each one is important individually, and as a collective system, these all work together to provide a range of mobility choices for all residents in all stages of life. Children do not drive, but can still achieve a certain level of mobility when walking and bicycle options exist. Otherwise, they must rely on others who can drive, which severely limits their mobility, and creates additional trip generation and travel demand. Elderly residents who cannot or do not feel safe driving on busy streets can benefit greatly by their ability to walk or use public transit, and access to these facilities is vital. Those who can safely use private vehicles often do, but sometimes it is not convenient because of parking problems or traffic congestion. In these cases, mobility alternatives may provide a much more efficient and effective transportation option.

Streets

Effective road systems that accommodate cars, pedestrians, and transit functions generally have a small and regular scale to streets, as is depicted in

the city diagrams on the following page. These diagrams, which represent a broad range of large metropolitan and smaller suburban communities are all at the same relative scale, and indicate street networks which are connected and integrated with a variety of mobility choices (car, transit, bicycle, pedestrian). The cities depicted are different from Sandy in many respects (size, density, climate, etc.), and are only shown because each illustrates an effective downtown district that integrates land use and transportation to create an effective overall system.

An effective way to solve some of the congestion problems currently experienced is to improve the network of streets and roads in downtown Sandy. The large street map which follows indicates areas where new or modified roads and street can improve the overall effectiveness of the transportation system. Although this plan does not show all of the potential street possibilities, it will be up to the staff and officials working with developers to increase the street network on a parcel by parcel basis.

Although not shown on the plan, there are a number of desirable easements that should be carefully considered for future roadways as development and redevelopment of private property occurs. Consultation and coordination with private property owners is essential to create a reliable and effective street network. Some possible scenarios for street network development include:

- Exploring additional north/south corridors to provide alternatives to State Street, especially for local trips
- Connecting 10200 South from I-15 to the TRAX corridor, and possibly further to the east into existing neighborhoods to enhance efficient east/west circulation, and to provide a more

Mobility Analysis

direct connection to a signalized State Street intersection for new office development.

- Realigning 10200 South east of State Street to divert traffic away from existing neighborhoods more directly to the light rail station
- Developing a road along the light rail corridor from the TRAX station to 10600 South to improve north/south traffic patterns, improve transit access, and divert traffic away from existing neighborhoods
- Developing a slip ramp from the Mall parking lot directly to the northbound ramp for I-15 for more efficient traffic flow
- Creating direct reciprocal access drives connecting businesses and other uses along the State Street corridor from 10600 South to 9400 South
- Realigning the 10000 South TRAX Station access with 10000 South to provide a more direct physical and visual connection to the civic center

Cross connections and alignment with existing roads is important, and individual development proposals should be carefully evaluated to achieve this community objective. The street system map includes several strategies for roadway improvements, which begin to illustrate an improved network of streets as part of this long-term solution.

Existing and proposed signalized intersections will provide pedestrian crossing capability, especially along State Street, in addition to regulating traffic flow. This will help slow down traffic, reducing congestion and conflict potentials, which is important in a multi-modal environment.

Transit

The predominant transit system that serves Sandy is a regional system that primarily provides service from Sandy to other communities. Recent and proposed developments will require a much more

localized and regular level of transit services to reduce the growth and traffic impacts of automobile usage, and provide greater mobility options.

Recommendations include an added TRAX station at 9400 South, new bus service on streets where service does not now exist (including 9400 South and Monroe Street), and a shuttle circulator system to connect the light rail stations with downtown destinations. A primary link between the 10000 South TRAX station and the Civic Center will primarily serve commuter traffic to/from the primary employment district. A secondary link between the Expo Center and the two hotel districts, and eventually including the proposed 9400 South TRAX Station will serve retail, entertainment, and event transportation needs. Transfer nodes between these two shuttle systems and other current and proposed bus routes will help provide further transit connectivity to the surrounding neighborhoods and the region.

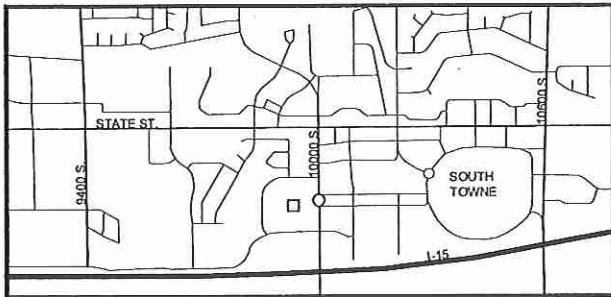
Trails and Open Space

The trail system map complements the street map, and in many cases, pedestrian and bicycle connections are aligned along streets and roadways. An efficient system includes both regional and local trails, including recreational trails and urban streetscapes for pedestrian use. A combination of appropriate intersections and grade separate crossings will help facilitate safe and efficient trail use.

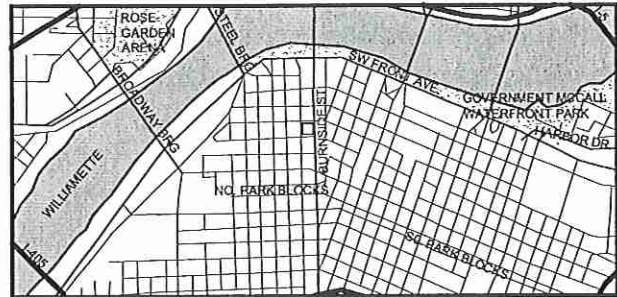
The trail system is an important part of the open space network. Trails are effective linear open spaces that bring desirable landscaping and other positive aesthetic benefits to community. The recommendations on the following map are intended to compliment the existing Trails Master Plan, and minor discrepancies in alignment or articulation should not be seen as a proposed alteration to the existing plan.

One significant element of the trails plan is the development of multiple trails along existing canal easements. This will require cooperation of regulatory agencies having jurisdiction over the canals. This will likely present challenges, but if these can be overcome, the result will be an extensive network of trails throughout the community.

Street Network Comparisons



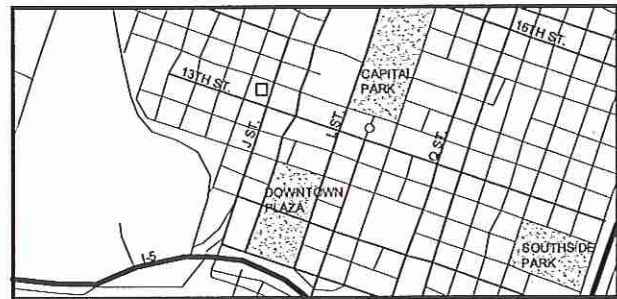
SANDY DOWNTOWN AREA



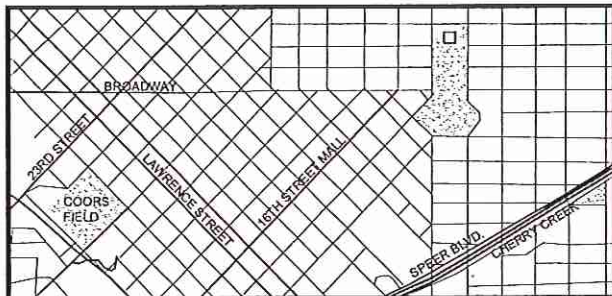
PORTLAND DOWNTOWN AREA



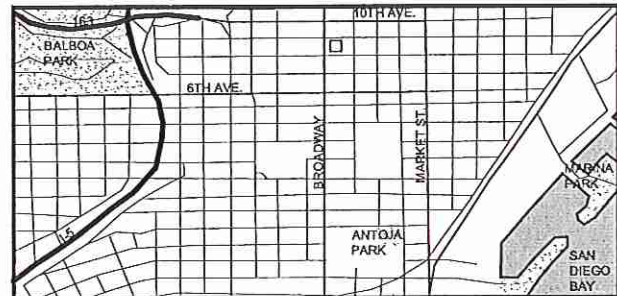
BOULDER DOWNTOWN AREA



SACRAMENTO DOWNTOWN AREA



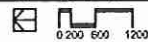
DENVER DOWNTOWN AREA



SAN DIEGO DOWNTOWN AREA



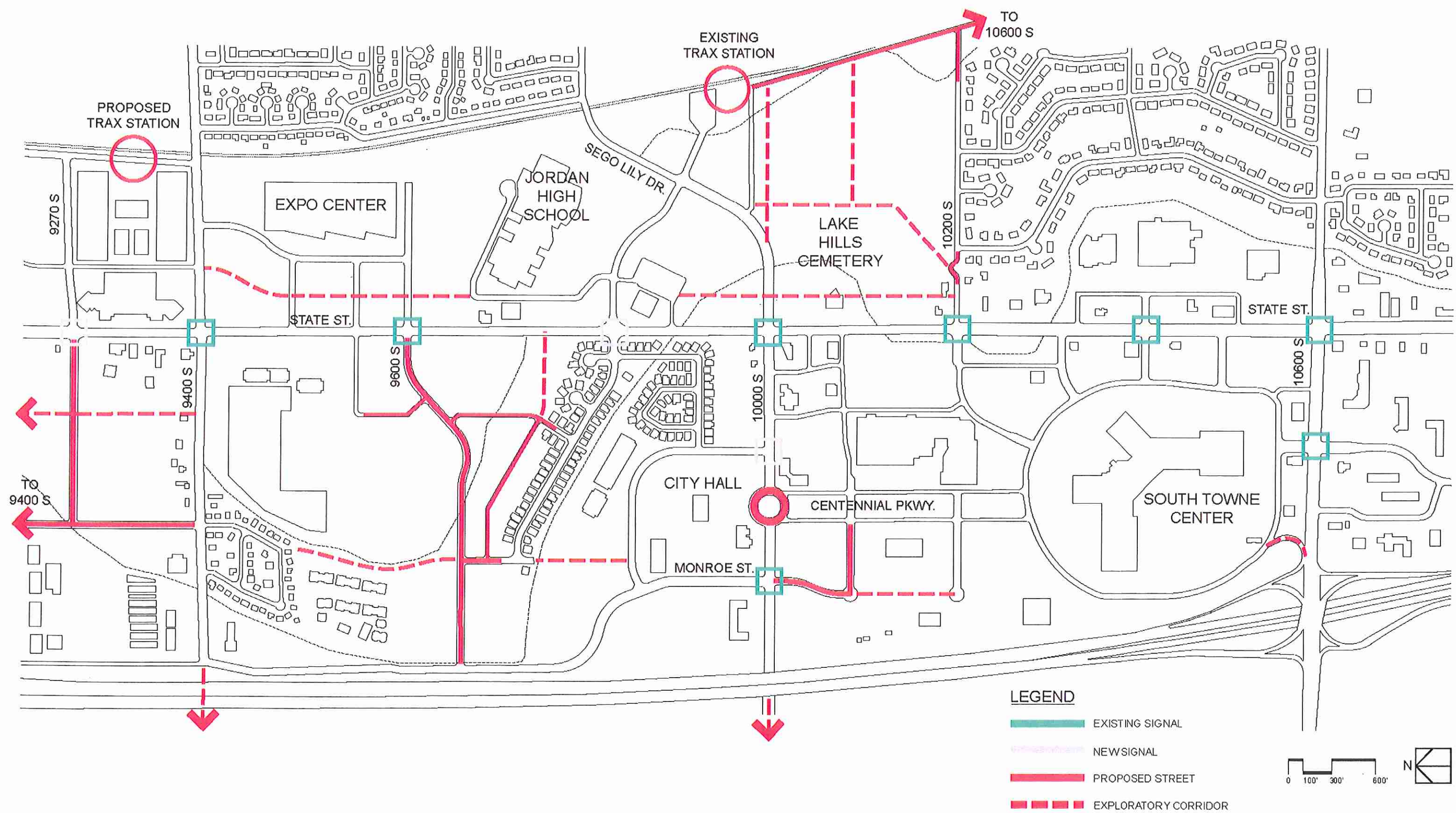
PALO ALTO DOWNTOWN AREA



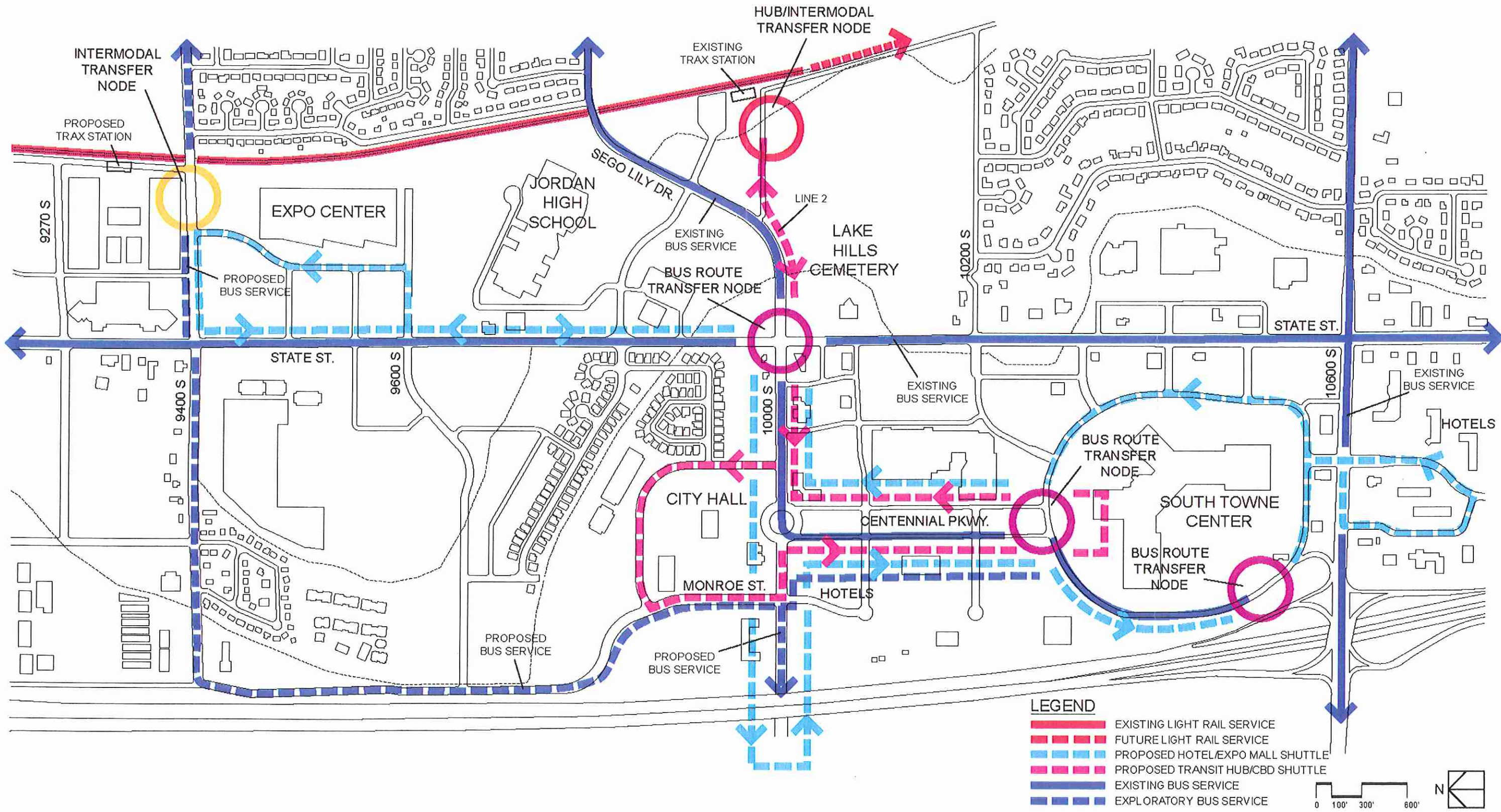
SEATTLE DOWNTOWN AREA



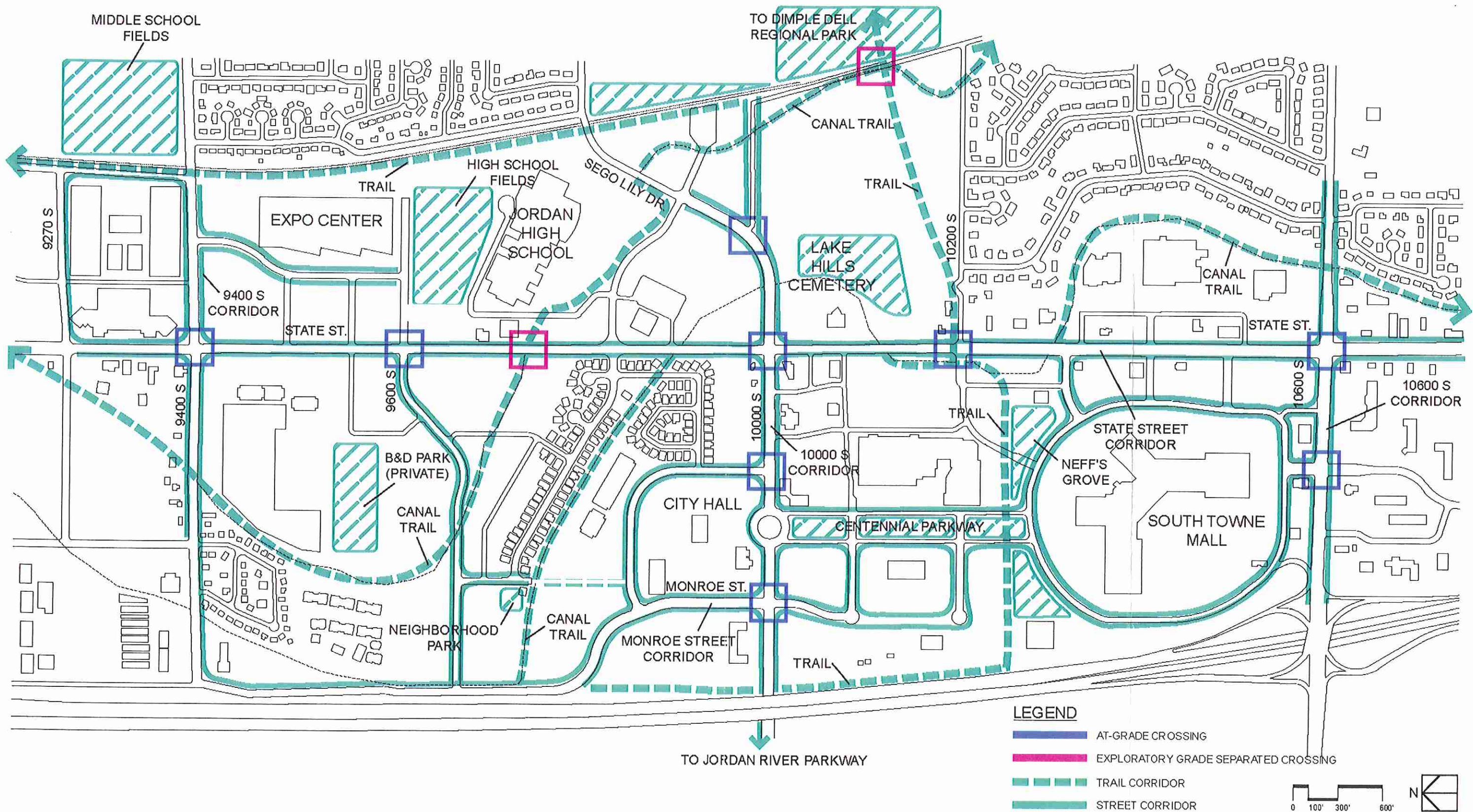
Streets & Exploratory Corridors Map



Transit Map



Trails & Open Space Map



Travel Demand Forecast Summary

Purpose

The purpose of the traffic analysis is to identify potential problems and address the impacts of the proposed Sandy City Downtown Illustrative Plan on the current and future anticipated transportation system.

Transportation Work Scope

The scope for this transportation analysis is two-fold:

1. The extent of this analysis is to determine future transportation impacts under the proposed land uses of the Sandy Downtown Illustrative Plan. The traffic study analyzes current and future 2030 average daily traffic (ADT) volumes on the transportation network within the study area on the following selected roadways:

- 94th South
- Sego Lily Drive
- 100th South
- State Street
- Monroe Street
- Centennial Drive
- Mall Perimeter Road
- 106th South

2. Analyze the operational conditions of the Centennial Drive/10000 South intersection under two different control scenarios, signalization and as a roundabout. Upon completion of the analysis and after a comparison of the two scenarios, a recommendation for the future intersection control will then be suggested.

Methodology

To analyze and compare current and future travel demand in the study area, a traffic model has been developed using TRAFFIX software. A transportation network was developed separating the study area into 29 zones. Current and future land uses have been supplied to the model, which computes demand and assigns travel to the transportation network. The new transportation model reflects daily traffic levels from a variety of proposed land use increases and/or changes such as retail, office, and residential.

Changes in the traffic from each zone are assigned to the network and distributed by the model. The model distribution is based on population density, trip attraction within the Sandy area and the region, supplemented with existing travel patterns, proximity to arterial and freeway access points, and physical geographic constraints.

Trip generation for the Sandy Downtown Illustrative Plan was established using the ITE Trip Generation Manual, 6th edition. Reductions to the ITE rates were applied in circumstances of mixed-use, transit-oriented development, and higher access to public transit facilities.

Existing Conditions

The study area currently contains a variety of land uses including, retail, office, governmental, residential, and a high school. Existing land uses are distinctly separated by natural and man-made barriers. There are also areas of vacant land around the Sandy City offices and along State Street. In addition, it is important to note the State Street and 10600 South are both state roads (US-89 and SR-151, respectively). As such, any improvements to

Mobility Analysis

those roads must be coordinated with the Utah Department of Transportation (UDOT).

To determine the existing traffic conditions on the critical roadways within the study area, new traffic counts were conducted. From these counts, current average daily traffic volumes (ADT) and current travel patterns are determined.

Under existing conditions, all roadways appear to operate under capacity. However, the 10600 South Corridor is an area of concern. Along 10600 South, between the I-15 interchange and State Street, existing traffic volumes appear to be approaching capacity.

According to the Sandy City Transportation Master Plan, 1996, the 10600 South corridor functional classification is an arterial with six lanes of travel. Therefore, the traffic capacity is 51,500 vehicles per day.

Currently traveling on 10600 South between Automall Drive and the I-15 interchange are approximately 45,000 vehicles per day. Between Automall Drive and State Street, there are approximately 50,000 vehicles trips per day. As previously stated, the carrying capacity is 51,500 vehicles per day along this segment.

Future Conditions

Proposed by the Sandy Downtown Illustrative Plan is a variety of land uses. The proposed additional new land uses consist of:

- 1,611,000 square feet office
- 500 hotel room
- 290,000 square feet of retail space
- 1,450 residential dwelling units

From the proposed land uses, approximately, 144,550 new vehicular daily trips will be generated.

This new traffic takes into account changes in travel patterns from improved transit access in the study area. The transit elements include; expanded service at the 10000 South station, a new TRAX station at 9400 South near the exposition center, and transit shuttle service from these two stations to the downtown core areas.

To make the transit system operate successfully, the transportation network will require that the roadways be designed and constructed to accommodate extensive pedestrian activity. Sidewalks and paths will need to be provided as proposed in the roadway cross-sections. Trails/paths will need to pass through the downtown area and connect to the City's Trails Master Plan.

Parking in the study area will need to change from 100% conventional lots to shared parking and parking structures. The construction of parking structures will allow for buildings to be placed closer together, which supports alternative modes of transportation (walk, bike, transit).

With this increase in vehicular daily traffic volumes, 10600 South between the I-15 interchange and State Street can expect 57,000 to 58,100 vehicles per day, exceeding current carrying capacity. State Street between 9400 South and 10600 South will carry 53,400 per day, also exceeding capacity. Both segments will need capacity improvements to accommodate this future demand.

It should be noted that physical geometric constraints may be limited; the addition of lanes and turn pockets must be respective of such constraints. The following mitigation suggestions will increase capacity. However, it should be realized that it is not always possible to develop urban cores with high intensity land uses without an increase in roadway congestion. Such congestion is tolerable if all feasible safety and roadway improvements have been implemented.

Transportation Mitigation Measures

In order to accommodate the future traffic demand, improvements will be needed at various points throughout the study area. Below are improvements necessary within the study area.

Transit

Improve the transit service at the 10000 South TRAX. Provide shuttle bus service from the TRAX stations to the downtown core areas.

Trails

Construct trails within the study and make connections to the City-wide trail system as adopted in the Parks and Trails Master Plan.

Parking

Develop mixed use parking areas and encourage the construction of new parking garages to allow for close placement of buildings to support alternative modes of transportation (walk, bike, transit).

Streets

The first phase of street construction may be to expand the existing roadway network through the extension of existing roadways and the construction of connections between proposed streets and some of the exploratory corridors as illustrated in the Street & Exploratory Corridor Map (see page 49). It is anticipated that expanding the existing roadway network will provide some relief for local traffic movement. The second phase of street construction may be to widen the existing roadway corridors. It is anticipated that some aspects of these two phases of construction may be completed simultaneously in order to provide the maximum benefit to the different types of roadway users. The following paragraphs describe the expansion of the existing roadway network and widening the existing roadway corridors on a street specific basis.

The first option is to expand the existing roadway network by adding additional north/south and east/west corridors to increase mobility within and around the downtown area.

- 200 West (extension): Create a new north/south road extending from City Center Drive to the existing stub intersection on Alta View Way and from 9700 South to 9500 South at approximately 200 West. Connecting existing local streets, this completed route will connect 9000 South to City Center Drive.
- 100 West (extension): Create a north/south connection between the proposed 9600 South extension to 9000 South on approximately 100 West.
- Alta View Way (connection): Provide a connection from Alta View Way to City Center Drive.
- Alta View Subdivision (connections): Provide two additional north/south connections between the Alta View Subdivision and the existing 10000 South Street.
- 100 East (extension/reciprocal access): Extend a north/south road from 9400 South, through the Exposition Center parking lot (providing reciprocal access) to the Jordan High School.
- 10100 South (extension): Provide an east/west connection between the Monroe Street (Frontage Road extension) and the Monroe Street (extension) as previously described.
- 10200 South (extension): Provide an east/west connection between the Monroe Street (Frontage Road extension) and the Monroe Street (extension) as previously described, and from the northbound Centennial Parkway to 10200 South intersection with State Street.
- 10000 South (extension): Extend 10000 South from Sego Lily Drive to a location west of the TRAX rail lines where the alignment will bend south paralleling the TRAX in a southeasterly direction to approximately 10100 South.

Mobility Analysis

These recommendations will provide additional north/south and east/west alternative routes that will accommodate local traffic movement through the roadway network. It is not anticipated that these improvements will eliminate the future need to widen State Street, however, these improvements may slightly modify the timing of the State Street widening while providing additional routes for local traffic.

The second option is to widen the existing roads. This option identifies deficiencies of the existing roadway network based on future traffic projections and recommends improvements as necessary. This oftentimes can have significant impacts to the surrounding land uses as widening will likely require additional rights-of-way and impact existing accesses. The following recommendations are shown on Figure B-1-2 located in Appendix B-1:

- 10600 South/Automall Drive: a right turn pocket should be added on the east, west, and northbound approaches.
- 10600 South/State Street: the existing east and westbound approaches consist of dual left turn lanes, two through lanes, and right turn pockets. Due to the traffic demands an additional through travel lane should be added to each approach, forcing the construction of right turn pocket into the existing parkstrips. The north and southbound approaches should also include the addition of a through travel lane and construction of exclusive right turn pockets.
- 10400 South/State Street: on the north and southbound approaches exclusive right turn pockets should be added making for three through lanes, a single left turn lane, and an exclusive right turn pocket. At this same intersection, the eastbound approach should have an exclusive right turn pocket added.
- 10200 South/State Street: on the southbound approach an additional through travel lane should be added, and on the north and southbound approaches exclusive right turn pockets should be added making for three through lanes, a single left turn lane, and an exclusive right turn pocket.
- 10000 South/State Street: on the north and southbound approaches exclusive right turn pockets and an additional through lane should be added making for three through lanes, a single left turn lane, and an exclusive right turn pocket. On the eastbound and westbound approaches right turn pockets and an additional through lane should be added making two through travel lanes, a single left turn lane, and an exclusive right turn pocket.
- 9800 South/State Street: the northbound approach should have an additional through lane and designated right turn lane. The southbound approach should have an additional through-right-turn lane added. No improvements should be necessary on the eastbound and westbound approaches.
- 9400 South/State Street: on the north and southbound approaches right turn pockets and a through lane should be added making for three through lanes, a single left turn lane, and an exclusive right turn pocket. The eastbound approach should have additional through-right-turn lane added. No improvements should be necessary on the westbound approach.
- Monroe/10000 South: the major leg of this T-intersection is 10000 South, with Monroe Street forming the minor single approach. Future plans are to construct the southern leg of this intersection.
- Sego Lily Drive/ 10000 South: in order to accommodate future travel demand and proposed land uses in the vicinity of the TRAX station, an additional travel lane on the east leg, eastbound direction is necessary. This travel lane will continue from an exclusive right turn pocket added to the northbound approach of Sego Lily Drive/ 10000 South.

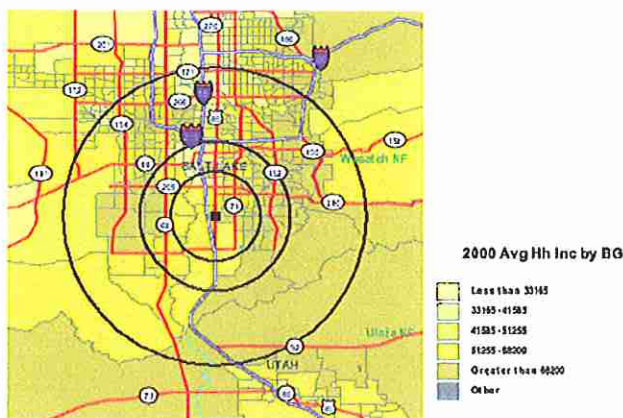
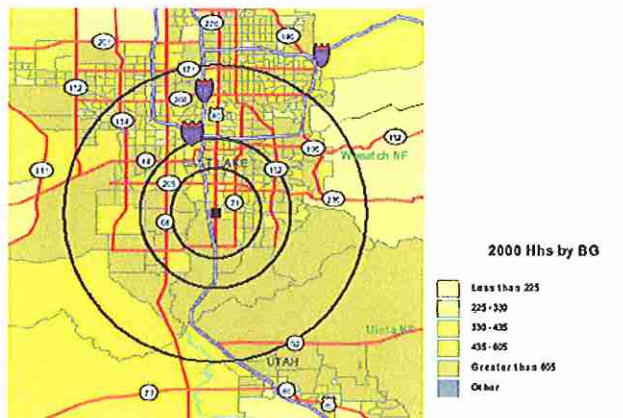
Retail Market Highlights

Summary

This is a summary of Retail Market Highlights for Downtown Sandy. A more complete economic and demographic market analysis can be found in Appendix C.

Primary Retail Trade Area

The Sandy Downtown primary trade area is defined as the population within a 1-10 mile drive from the area, which should represent 70% to 80% of total sales.



Population – 2000 – Primary Retail Trade Area

Population information allows you to quantify the market size and measure future growth. Population is defined as all living persons in a geographic area. Group quarters include non-household living arrangements such as military barracks, college dormitories, long-term health care facilities, group homes, boarding houses, prisons, and jails.

POPULATION	10 mile
2005 Population Projection	613,255
2000 Population Estimate	584,389
1990 Census Population	474,936
2000 Population Per Square Mile	1,861
2000 Group Quarters Population	5,092

Households – 2000

Households consist of one or more persons who live together in the same housing unit, regardless of their relationship to each other. Households include all occupied housing units.

HOUSEHOLDS	10 mile
2000 Average Household Size	3.06
2005 Household Projection	204,206
2000 Household Estimate	189,488
1990 Households	145,778

Projections of Demand for Retail Expenditures

These projections are based on annualized data from the Consumer Expenditure Survey, and are based on the income levels and expenditure patterns of the households in the retail market area.

Economic Analysis

These following retail demand projections are based on the above annualized household expenditure data and the projections of the number of the households in the primary retail market area.

Total Retail Sales – 2000 Ten Mile Market Area	Retail Sales \$/HH	Potential Sales (\$000)
Total Retail	\$17,214	\$3,259,760
Food Service	\$5,215	\$987,530
Apparel & Services	\$1,312	\$248,430
Drug	\$490	\$92,784
Transportation	\$5,216	\$987,739
Leisure & Entertainment	\$1,709	\$323,667
Home Furnishings	\$2,647	\$501,201
Other Retail Expenditures	\$625	\$118,408

Retail Growth Opportunities

The retail growth opportunities in the next five years (see table on opposite page) based on expenditure patterns of the households in the retail market area would therefore appear to be in the following categories:

- Home Improvement
- Automotive Aftermarket
- Leisure & Entertainment
- Groceries
- Dining Out

A more detailed economic analysis and data can be found in Appendix C.

Discrepancies in subtotals and totals in the following figures are attributed to rounding.

	Primary Trade Area Retail Demand 2000 (000)	Primary Trade Area Retail Demand 2005 (000)	Growth (Decline) (000)
Total Retail Expenditures	\$ 3,259,760	\$ 3,515,202	\$ 255,442
Food Service	987,530	\$ 1,064,934	\$ 77,404
Groceries	664,461	\$ 716,559	\$ 52,098
Dining Out	262,321	\$ 282,825	\$ 20,504
Other	60,749	\$ 65,550	\$ 4,801
Apparel & Services	248,430	\$ 267,918	\$ 19,488
Women's	84,346	\$ 90,872	\$ 6,526
Men's	53,030	\$ 57,178	\$ 4,148
Family	46,818	\$ 50,439	\$ 3,621
Shoes	26,716	\$ 28,793	\$ 2,077
Watches and Jewelry	29,439	\$ 31,652	\$ 2,213
Other	8,082	\$ 8,781	\$ 699
Drug	92,784	\$ 100,061	\$ 7,277
Prescription	40,935	\$ 44,108	\$ 3,173
Personal Care	51,849	\$ 55,952	\$ 4,103
Transportation	987,739	\$ 1,065,138	\$ 77,399
Automotive Aftermarket	317,383	\$ 342,249	\$ 24,866
Travel	81,316	\$ 87,604	\$ 6,288
Other	589,040	\$ 635,285	\$ 46,245
Leisure & Entertainment	323,667	\$ 348,988	\$ 25,321
Books and Periodicals	35,693	\$ 38,391	\$ 2,698
Pet Care	27,669	\$ 29,814	\$ 2,145
Sporting Goods	22,006	\$ 23,688	\$ 1,682
Toys	22,673	\$ 24,505	\$ 1,832
Video Purch/Rental	17,990	\$ 15,315	\$ (2,675)
TV/VCR/Video Cameras	13,502	\$ 19,604	\$ 6,102
Audio Equip	4,546	\$ 4,901	\$ 355
Photo Equip & Film Proc	8,864	\$ 9,598	\$ 734
Other	170,725	\$ 184,194	\$ 13,469
Home Furnishings/Improvement	501,201	\$ 540,533	\$ 39,332
Home Furnishings	160,162	\$ 172,758	\$ 12,596
Home Improvement	240,165	\$ 258,933	\$ 18,768
Home Services	100,874	\$ 108,842	\$ 7,968
Other Retail Expenditures	118,408	\$ 127,629	\$ 9,221

Residential Market Highlights

The analysis of the market for a housing development in the Sandy City Downtown Area focused on population, household formation and income, and employment trends anticipated in the area.

The market area for housing in the Sandy City Downtown Area was delimited by evaluating major employment centers within a 20- to 40-minute commute. This evaluation was premised that employees typically purchase or rent only that housing which lies within a 20 to 40 minute commute from their place of work.

In determining the demand for housing population projections, household projections and competing housing availability were evaluated.

Population Projections – 2000

Population information allows you to quantify the market size and measure future growth. Population is defined as all living persons in a geographic area. Group quarters include non-household living arrangements such as military barracks, college dormitories, long-term health care facilities, group homes, boarding houses, prisons, and jails.

This is the same information that was reviewed in the Retail Demand Section.

POPULATION	5 mile	10 mile	15 mile
2005 Population Projection	264,111	613,255	930,937
2000 Population Estimate	245,161	584,389	888,655
1990 Census Population	175,165	474,936	737,744
2000 Population Per Square Mile	3,123	1,861	1,257
2000 Group Quarters Population	3,166	5,092	11,343

Households – 2000

Households consist of one or more persons who live together in the same housing unit, regardless of their relationship to each other. Households include all occupied housing units.

HOUSEHOLDS	5 mile	10 mile	15 mile
2000 Average Household Size	3.33	3.06	2.87
2005 Household Projection	80,536	204,206	325,279
2000 Household Estimate	72,678	189,488	303,631
1990 Households	49,071	145,778	240,532

Income – 2000

Income is a good indicator of the spending power of the market. Per Capita Income includes the income of all persons 15 years old and over. Median Income divides the income distribution into two equal parts, one-half falling above the median and one-half below.

Population by Age – 2000

Population by age provides valuable information as to the relative maturity or youth of a particular market. Median age divides the age distribution into two equal parts, one-half falling below the median and one-half above.

Economic Analysis

INCOME - 2000	5 mile	10 mile	15 mile
% Under \$10,000	3.1	3.6	5.1
% \$10,000-\$14,999	2.4	2.9	4.1
% \$15,000-\$24,999	7.7	9.4	11.1
% \$25,000-\$34,999	11.2	13.2	14.1
% \$35,000-\$49,999	19.4	20.9	20.5
% \$50,000-\$74,999	26.4	24.5	22.5
% \$75,000-\$99,999	15.5	13.1	11.5
% \$100,000-\$149,000	11.3	9.4	8.3
% \$150,000+	2.9	2.9	2.7
2000 Per Capita Income	\$ 19,748	\$ 20,247	\$ 20,014
2000 Average Household Income	\$ 66,335	\$ 62,207	\$ 58,319
2000 Median Household Income	\$ 56,460	\$ 52,397	\$ 48,414

POPULATION BY AGE - 2000	5 mile	10 mile	15 mile
% Under Age 5	10.0	9.8	9.6
% Age 5-14	20.4	18.8	17.4
% Age 15-17	6.8	6.2	5.8
% Age 18-20	5.0	5.0	5.2
% Age 21-24	5.8	6.5	7.1
% Age 25-34	13.5	14.0	14.3
% Age 35-44	16.1	15.0	14.4
% Age 45-54	12.3	12.1	11.4
% Age 55-64	5.2	6.4	6.6
% Age 65-74	2.7	3.6	4.2
% Age 75-84	1.6	2.0	2.9
% Age 85 +	0.5	0.6	1.0
Average Age of Total Population	29.1	30.3	31.4
Median Age of Total Population	26.4	28.1	28.7

POPULATION BY AGE	2000%	# 2000	2005%	# 2005	Pop Change 2000-05
% Age 18-24	12.3	109,305	11	102,403	-6,901
% Age 25-34	14.3	127,078	7.1	66,097	-60,981
% Age 35-44	14.4	127,966	14.3	133,124	5,158
% Age 45-54	11.4	101,307	14.4	134,055	32,748
% Age 55-64	6.6	58,651	11.4	106,127	47,476
% Age 65+	8.1	71,981	13.7	127,538	55,557

Projections of Increased Housing Demand – Ten Mile Radius

In determining the demand for increased housing, population projections, household projections and housing affordability were evaluated. Housing demand is clearly greatest for the age groups 55 years and older.

Estimates of demand for housing is also strongly impacted by both the growth in population as well

as the type and affordability of each new household. The age groups 55 years and older also typically have more discretionary income to spend on housing, eating out, and entertainment.

In addition, the considerable decline in population in the 18 - 34 year age groups may suggest a lack of affordable housing options for young single or family households in the community, which results in outmigration of individuals and families to other communities.

General Guidelines

Building Form & Massing

Avoid long and monotonous walls and roof planes. Reduce apparent mass of large buildings by manipulating building form using offsets and recesses, and changes in height. Building heights are regulated by the underlying zoning, but should generally be compatible with surrounding structures (i.e., not more than three stories higher or lower than any building within 50 feet). Canopies, awnings, colonnades, overhanging balconies, and other architectural projections are encouraged to provide visual interest and promote pedestrian activity.

Orientation

Buildings should front onto public ways. Orient smaller building dimensions toward public streets where siting allows.

Circulation

Provide pedestrian links through and around buildings. Traffic crossings (public or private streets, or internal traffic lanes) should be articulated with contrasting paving materials or markings, and paths should be designed to facilitate safe pedestrian movement.

Yard

Where Streetscape Standards allow for or require building setbacks, provide for open landscaped yard areas as buffers at buildings and streets. Provide landscape buffers between buildings and parking lots.

Landscaping and Tree Placement

Landscaping should be designed in accordance with adopted City policies and ordinances. Drought



Building massing is broken by articulation of roof lines and wall planes. Architectural features, canopies, and balconies add visual interest and create a comfortable pedestrian scale.



Pedestrian amenities and articulated crossings provide a safer environment to accommodate both people and vehicles.

Design Guidelines

tolerant trees, non-turf ground covers, and ornamental vegetation should be planted, preferably in groups to provide maximum shade, decrease maintenance, reduce water usage, and promote more natural growth patterns. Similar landscaping should be used for parking lots, buffers, streetscapes, and medians. Water-conserving irrigation systems should be used, and should be automatic with rain shut-off mechanism. Plants should be “hydro-zoned” where they are grouped together according to irrigation requirements. Deciduous trees should be used especially on the south and west sides of the building and should be located to shade windows, air conditioning and other mechanical equipment, and exterior wall surfaces. All trees should be mulched.

Parking

Orient parking toward sides and rear of buildings where possible. Use shared parking and parking structures with adjacent uses.

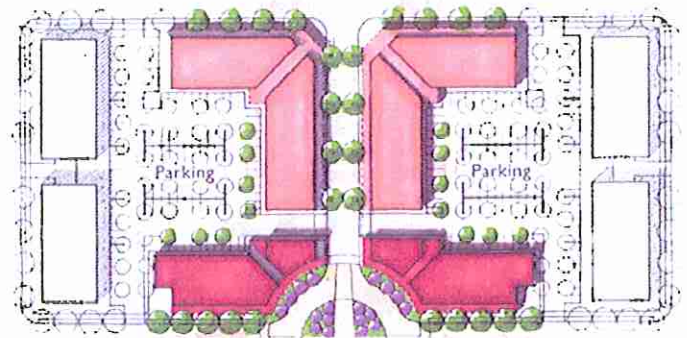
For surface parking, provide for at least 10% of total off-street parking area as interior landscaping with 20% minimum shade covering where concrete or light colored paving is used (at least 50% reflectance), or 20% minimum interior landscaping with 30% shade covering where asphalt or other dark colored paving is used (less than 50% reflectance). For structured parking, provide 5% of top (open) deck parking area as interior landscaping, with 10% minimum shade covering.

Interior landscaping should be distributed uniformly throughout parking areas. Landscaping islands should contain deciduous shade trees for shade covering and non-turf ground covers.

Pedestrian paths and crossings should be articulated with pavers or other alternate paving materials, used consistently throughout the area.



Landscaping is used to add character and soften the building site.



Shared parking oriented toward the interior of blocks improves the character of the street edge.



Shading and landscaping in parking areas can reduce ambient air temperature and adds quality to a shopping experience.

Roofs

Flat, hip, or gabled roofs are preferred as primary roof forms. Shed and vaulted roofs are acceptable as secondary roofs. Other roof forms may be allowed subject to design review and approval by the Planning Commission. Roof forms should be designed to shed snow away from pedestrian circulation areas. Roofing materials, where visible, should be harmonious with other building materials.

Where building roofs exceed 8,000 square feet, encourage an equivalent of 5% of the roof area to be composed of light-transmitting materials in the form of skylights, dormers, windows in interior courtyards or other means to provide natural lighting to building interiors and break up roofing surface.

Low sloped roofs (less than 3:12 pitch) should be highly-reflective (a minimum total solar reflectance of 0.75 when tested in accordance with ASTM E903 standards, and a minimum infrared emittance of 0.75 when tested in accordance with ASTM E903 standards). Rooftop gardens should be considered where applicable.

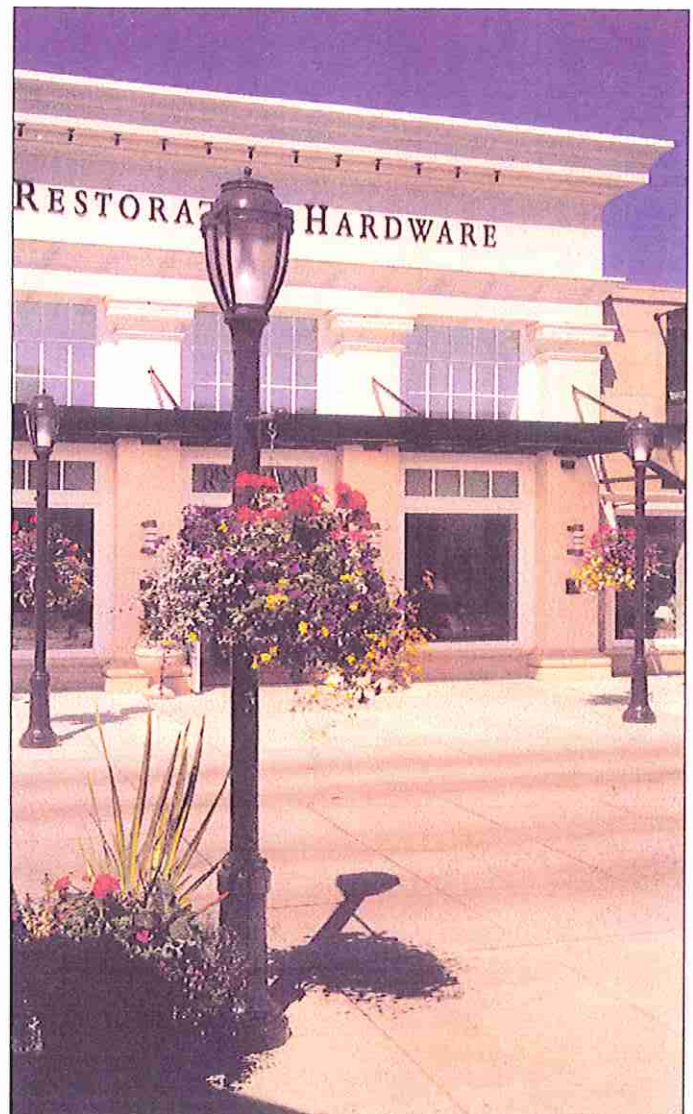
Mechanical equipment mounted on the rooftop should be sufficiently screened with parapets or other elements to avoid direct visibility from adjacent walkways or buildings (except where an adjacent building is greater in height).

Lighting

Do not exceed IESNA footcandle level requirements as stated in the *Recommended Practice Manual: Lighting for Exterior Environments*. Provide 2.0 footcandles average lighting at 5'-0" above grade at sidewalks, and 1.5 footcandles average at 5'-0" above grade ambient lighting for all other outside paved areas. Design interior and exterior lighting such that zero direct-beam illumination leaves the site.



Distinctive placemarking is created through variety of forms and colors rather than a homogenous architectural theme.



Lighting and light fixtures can be used as a consistent and unifying element throughout a district with varied architectural styles.

Design Guidelines

Pole fixtures should not exceed 15'-0" height along pedestrian routes. Fixture styles should be used consistently throughout area to provide visual continuity. Posts and standards should be placed so that they do not create hazards for pedestrians or vehicles. Use building accent lighting to emphasize major building entrances at night.

Signage

Use pedestrian oriented signage. Front-lit or partial backlit signs are preferred over fully backlit signs. Only one identification sign is allowed per building entrance, and should be located near the entrance for pedestrian orientation. In multi-tenant buildings, individual tenant signs should be located on a building directory near the entrance, preferably inside a lobby or entry vestibule.

Wayfinding and directional signage should be provided to identify and provide direction to significant destinations such as city districts, cultural attractions, civic and shopping centers and other downtown amenities. Such signage should be predictable and highly visible, and located for use by both pedestrians and drivers.

Public Art

Public artwork should be encouraged and can be utilized to provide community identity, and should be well integrated into building and site design. Murals, statuary, site furnishings and building elements can reflect local cultural and ethnic interests, and add a unique element to public spaces. A community arts program such as has been utilized through the "Art-in-Transit" program can feature work of local artists, and reflect local art interests.



Building signs and storefronts can be oriented toward pedestrians, and provide additional scale and context.



Public art work can change the character of buildings and streets, and highlight local culture and heritage.

Overview

General

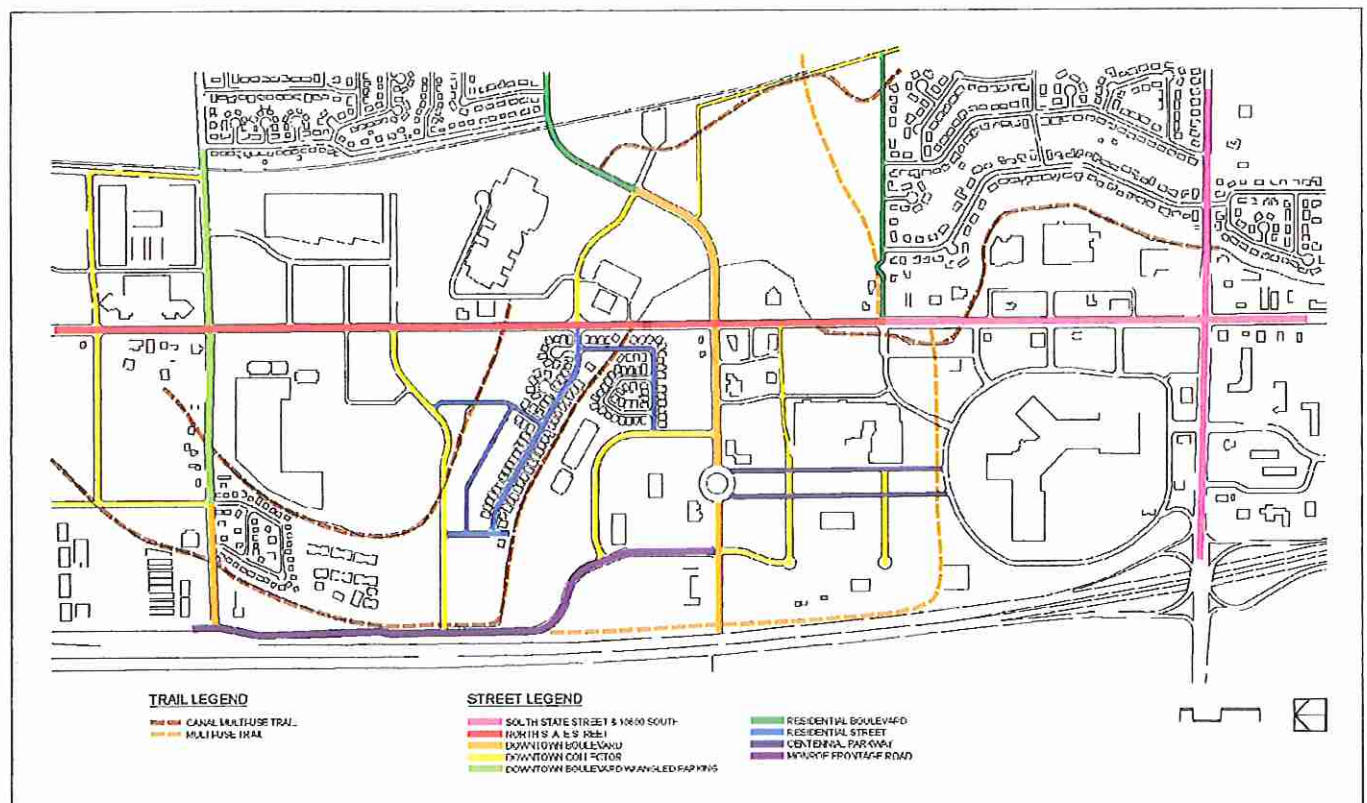
The Sandy Downtown Master Plan contains eleven general road types with some minor variations, and two trail types. These types are defined as (page references in parenthesis):

- South State Street & 10600 South (p. 72)
- North State Street (p. 74)
- Downtown Boulevard (p. 76)
- Downtown Collector (p. 78)
- Downtown Boulevard with Angled Parking (p. 80)
- Residential Boulevard (p. 82)
- Residential Street (p. 84)
- Centennial Parkway (p. 86)
- Monroe Frontage Street (p. 88)

Trail types include:

- A—Canal Multi-Use Trail (p. 90)
- B—Parkway Trail (p. 92)

The streetscape standards depicted in the following pages of this document are intended to illustrate considerations for automobile, transit, bicycle and pedestrian traffic. In the downtown environment, pedestrian activity is the driving factor to create a comfortable setting for human activity. Consider narrowing vehicle lanes to reduce the impact of vehicles to other mobility modes, and provide pedestrian amenities that will help create natural buffers between people and cars. A tight fabric of buildings, landscaping, street furnishings and lighting will help to create a safe, habitable environment.



Design Guidelines

South State Street/10600 South

Designation

Major arterial roadway serving both local and regional traffic in and through the city, and providing access to regional retail shopping center. Design guidelines are intended for use only in vicinity of the downtown area where traffic calming is desirable for compatibility with increased pedestrian activity.

Design Criteria

121' Total Right-of-Way
45 m.p.h. Design Speed
35 m.p.h. Posted Speed

Setbacks

10' minimum setback. 30' maximum setback.

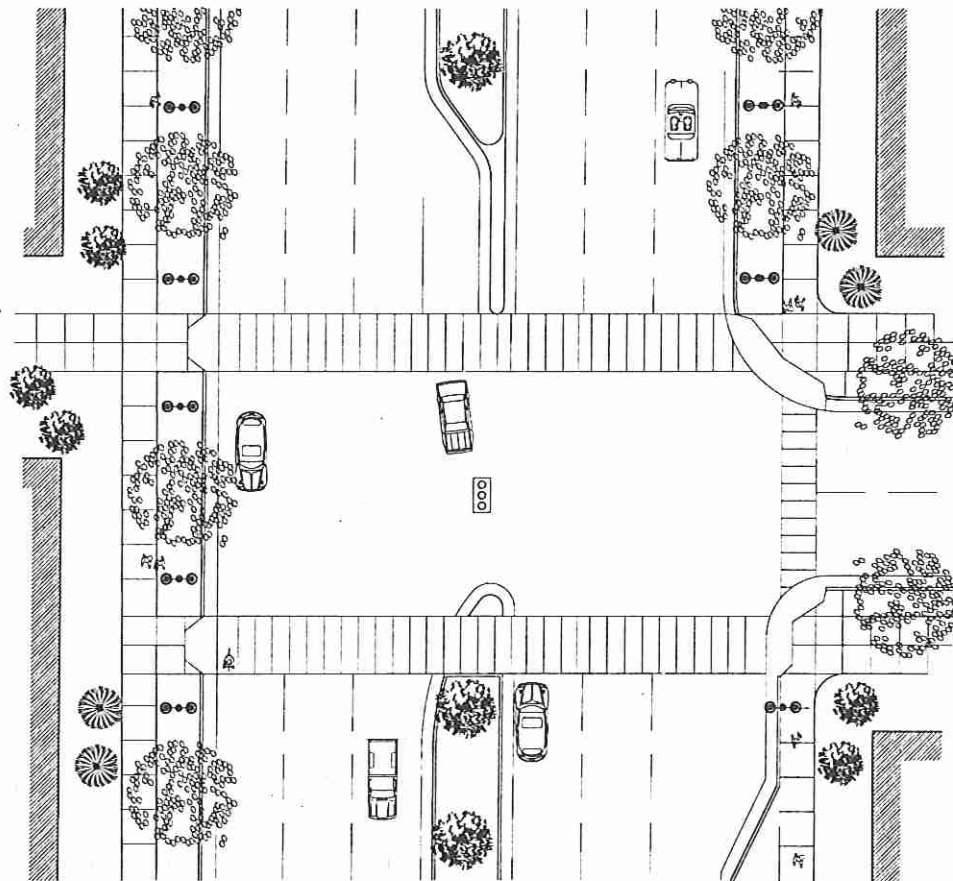
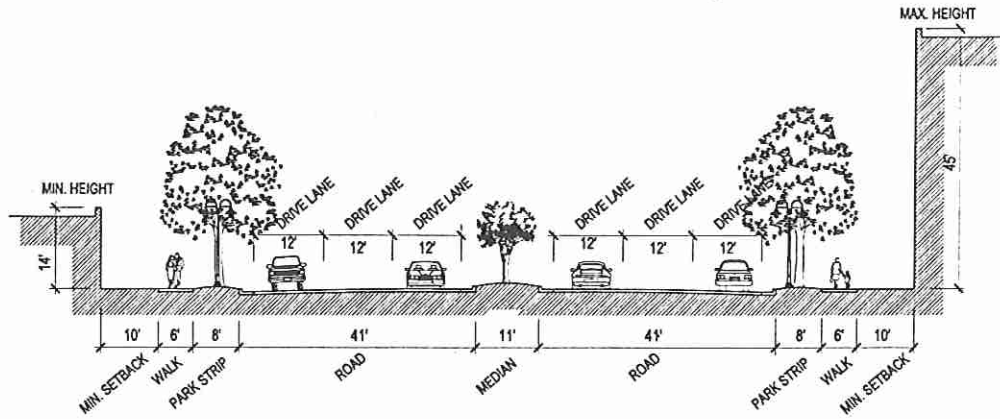
Affronting Building Facades

Buildings fronting onto the street should be one to three stories, with a minimum eave or cornice height of 14' and maximum height of 45'. Building height should be articulated at roadway intersections.

Paving Materials

Road surfaces should be paved with concrete to reduce surface heat, lower ambient air temperature, and reduce life-cycle costs and long-term maintenance requirements. Paving should comply with applicable Utah Department of Transportation (UDOT) concrete roadway standards. Pedestrian crossings should be articulated with contrasting colors or paving materials, used consistently throughout the district.

South State Street/10600 South



Designation

Major arterial roadway serving both local and regional traffic in and through the city, with anticipated increased pedestrian activity at the heart of the downtown area. Design guidelines are intended for use only in vicinity of the downtown area where traffic calming is desirable for compatibility with increased pedestrian activity. Outside could be used as parking until demand warrants use as a travel lane.

Design Criteria

121' Total Right-of-Way
45 m.p.h. Design Speed
35 m.p.h. Posted Speed

Setbacks

0' minimum setback. 5' maximum setback for recessed entries.

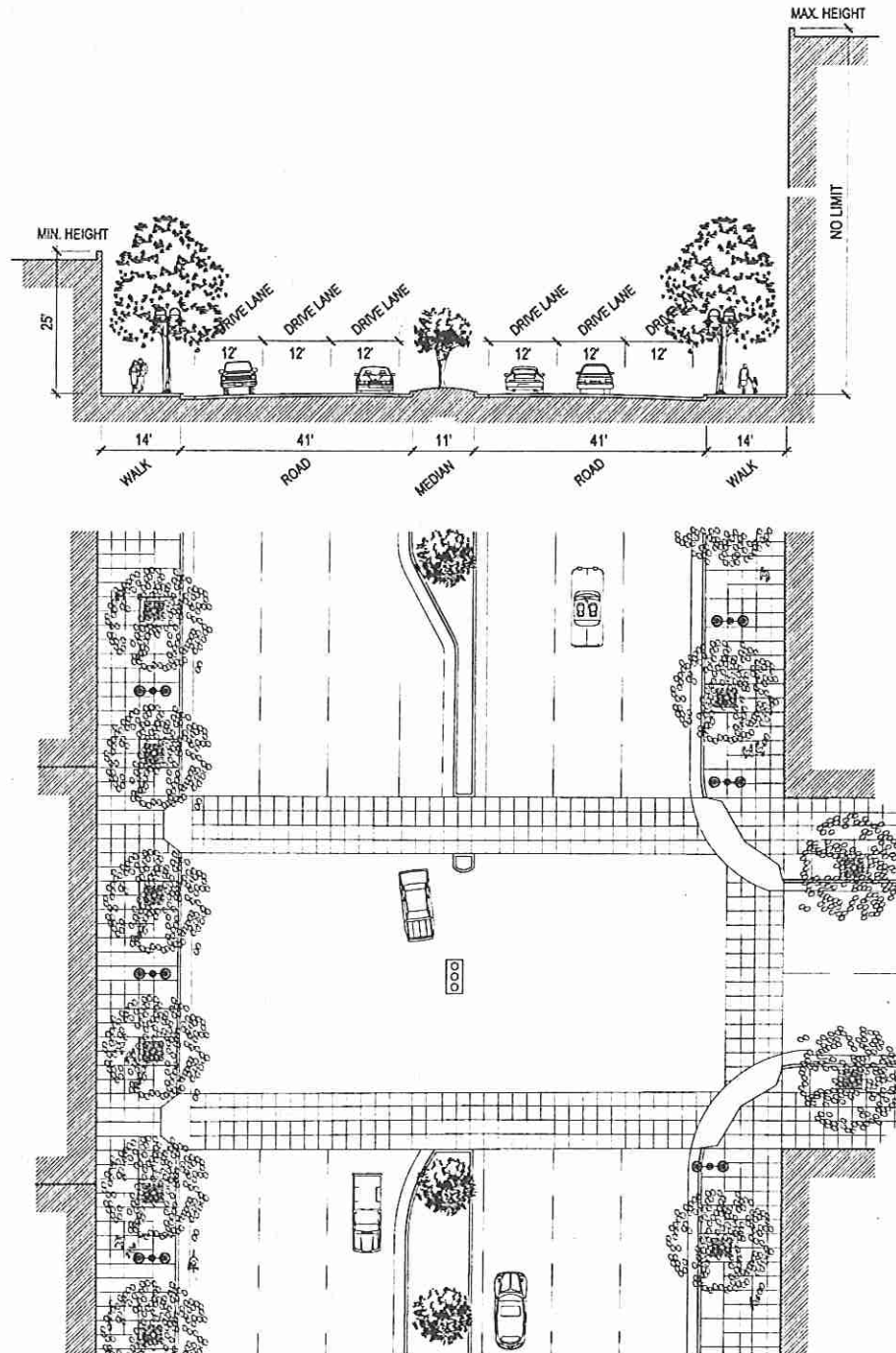
Affronting Building Facades

Buildings fronting onto the street should be two or more stories, with a minimum eave or cornice height of 25' and maximum height as regulated by zoning ordinance.

Paving Materials

Road surfaces should be paved with concrete to reduce surface heat, lower ambient air temperature, and reduce life-cycle costs and long-term maintenance requirements. Paving should comply with applicable Utah Department of Transportation (UDOT) concrete roadway standards. Pedestrian crossings should be articulated with contrasting colors or paving materials, used consistently throughout the district.

North State Street



Downtown Boulevard

Designation

Major collector street serving both local and regional traffic in and through the city, with anticipated increased pedestrian activity at the heart of the downtown area.

Design Criteria

106' Total Right-of-Way

35 m.p.h. Design Speed

30 m.p.h. Posted Speed

Setbacks

0' minimum setback. 5' maximum setback for recessed entries.

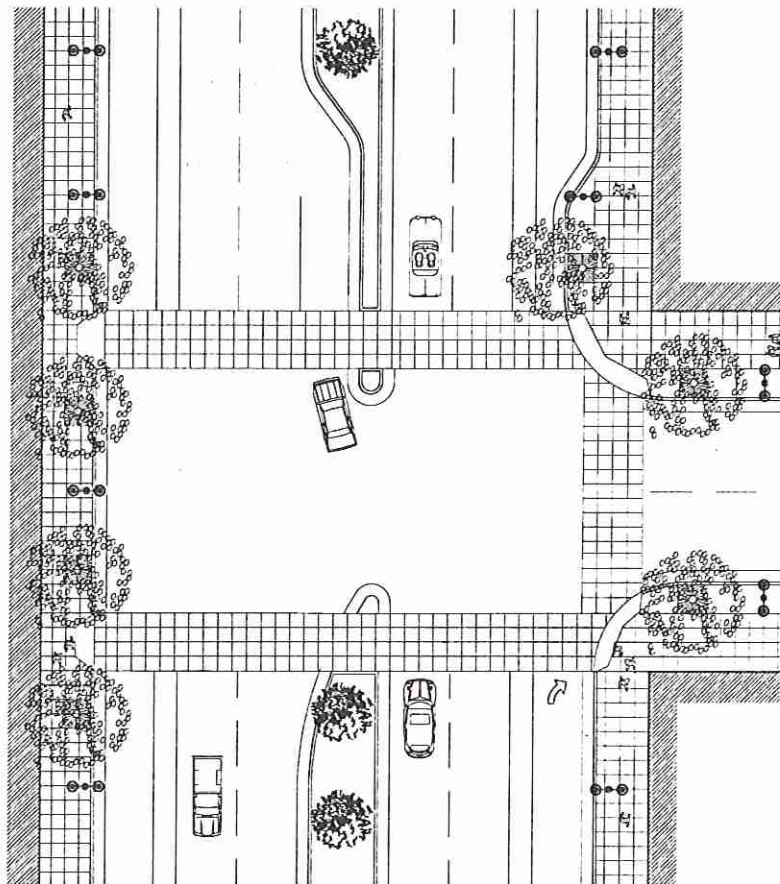
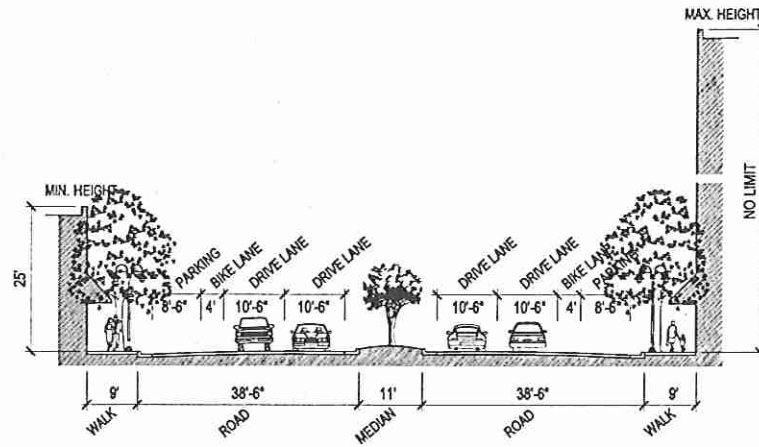
Affronting Building Facades

Buildings fronting onto the street should be two or more stories, with a minimum eave or cornice height of 25' and maximum height as regulated by zoning ordinance.

Paving Materials

Road surfaces should be paved with concrete to reduce surface heat, lower ambient air temperature, and reduce life-cycle costs and long-term maintenance requirements. Paving should comply with applicable Utah Department of Transportation (UDOT) concrete roadway standards. Pedestrian crossings should be articulated with contrasting colors or paving materials, used consistently throughout the district.

Downtown Boulevard



Designation

Minor collector street serving primarily local traffic in and through the downtown area, with anticipated increased pedestrian activity at the heart of the downtown area. Alternate design with center turn lane and without on-street parking—for use in areas of reduced streetfront activity and where major entrances to parking areas may warrant a center turn lane.

Design Criteria

70' Total Right-of-Way
35 m.p.h. Design Speed
30 m.p.h. Posted Speed

Setbacks

0' minimum setback. 5' maximum setback for recessed entries.

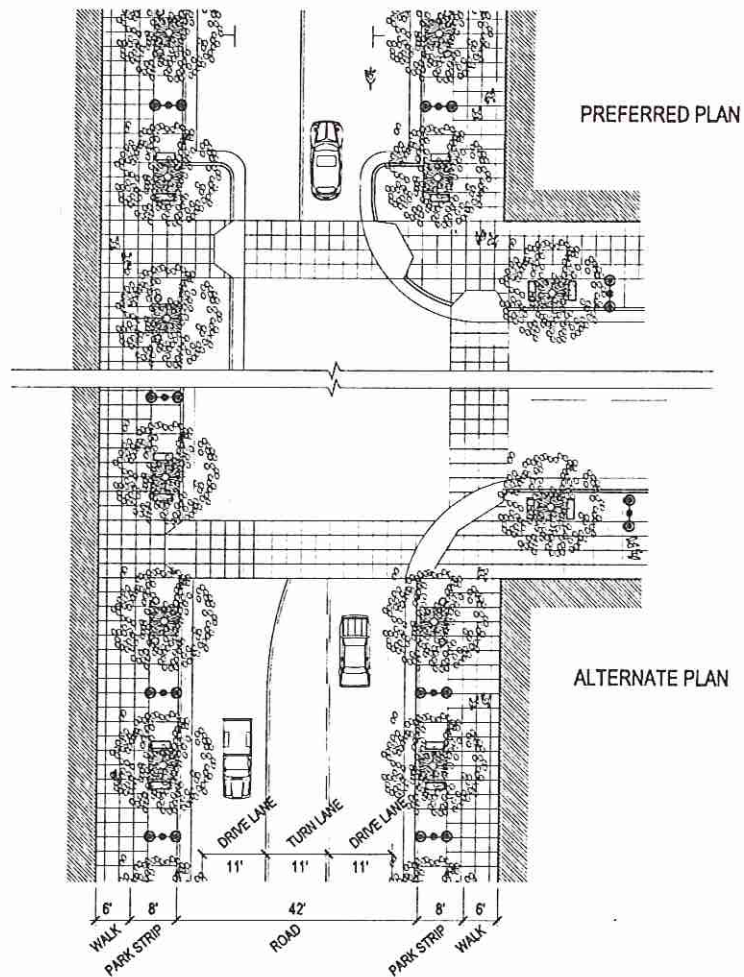
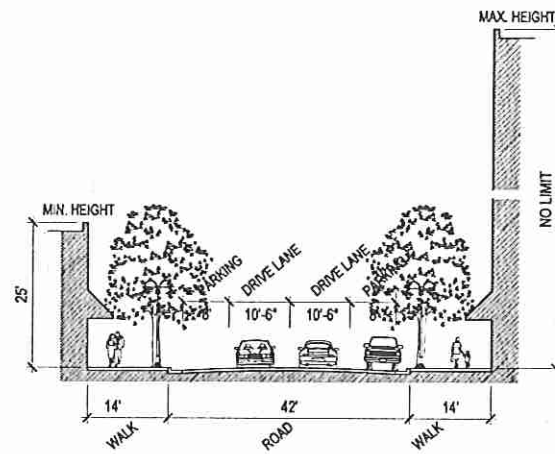
Affronting Building Facades

Buildings fronting onto the street should be two or more stories, with a minimum eave or cornice height of 25' and maximum height as regulated by zoning ordinance.

Paving Materials

Road surfaces should be paved with concrete to reduce surface heat, lower ambient air temperature, and reduce life-cycle costs and long-term maintenance requirements. Paving should comply with applicable Utah Department of Transportation (UDOT) concrete roadway standards. Pedestrian crossings should be articulated with contrasting colors or paving materials, used consistently throughout the district.

Downtown Collector



Downtown Boulevard with Angled Parking

Designation

Major collector street serving both local and regional traffic, with significantly increased pedestrian activity and extensive on-street parking.

Design Criteria

121' Total Right-of-Way

30 m.p.h. Design Speed

25 m.p.h. Posted Speed

Setbacks

0' minimum setback. 5' maximum setback for recessed entries.

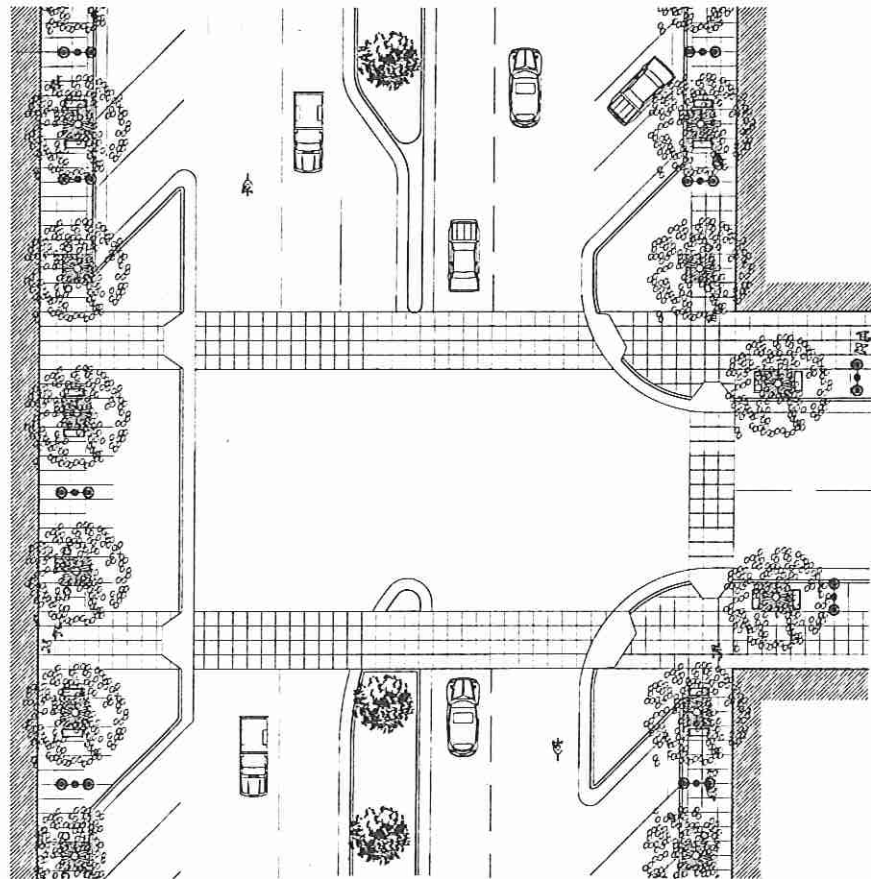
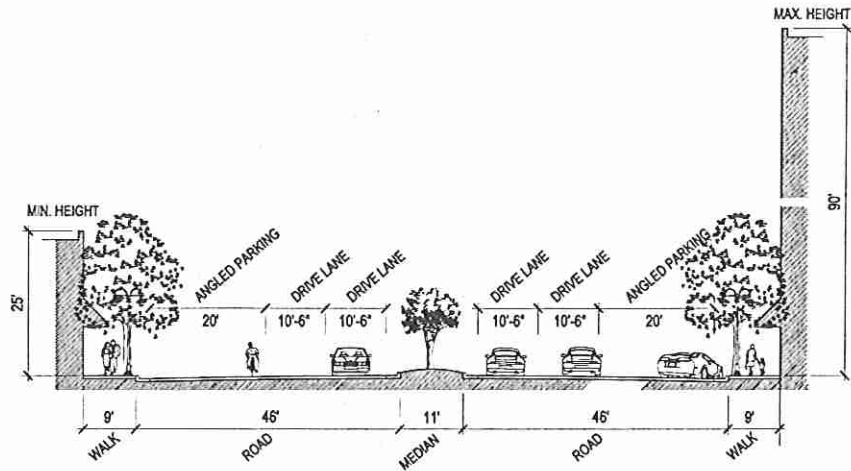
Affronting Building Facades

Buildings fronting onto the street should be two to six stories, with a minimum eave or cornice height of 25' and a maximum height of 90'.

Paving Materials

Road surfaces should be paved with concrete to reduce surface heat, lower ambient air temperature, and reduce life-cycle costs and long-term maintenance requirements. Paving should comply with applicable Utah Department of Transportation (UDOT) concrete roadway standards. Pedestrian crossings should be articulated with contrasting colors or paving materials, used consistently throughout the district.

Downtown Boulevard with Angled Parking



Residential Boulevard

Designation

Major residential collector street serving primarily local traffic in and through the downtown area, including pedestrian and bicycle traffic.

Design Criteria

66' Total Right-of-Way
35 m.p.h. Design Speed
25 m.p.h. Posted Speed

Setbacks

20' minimum setback. 35' maximum setback.

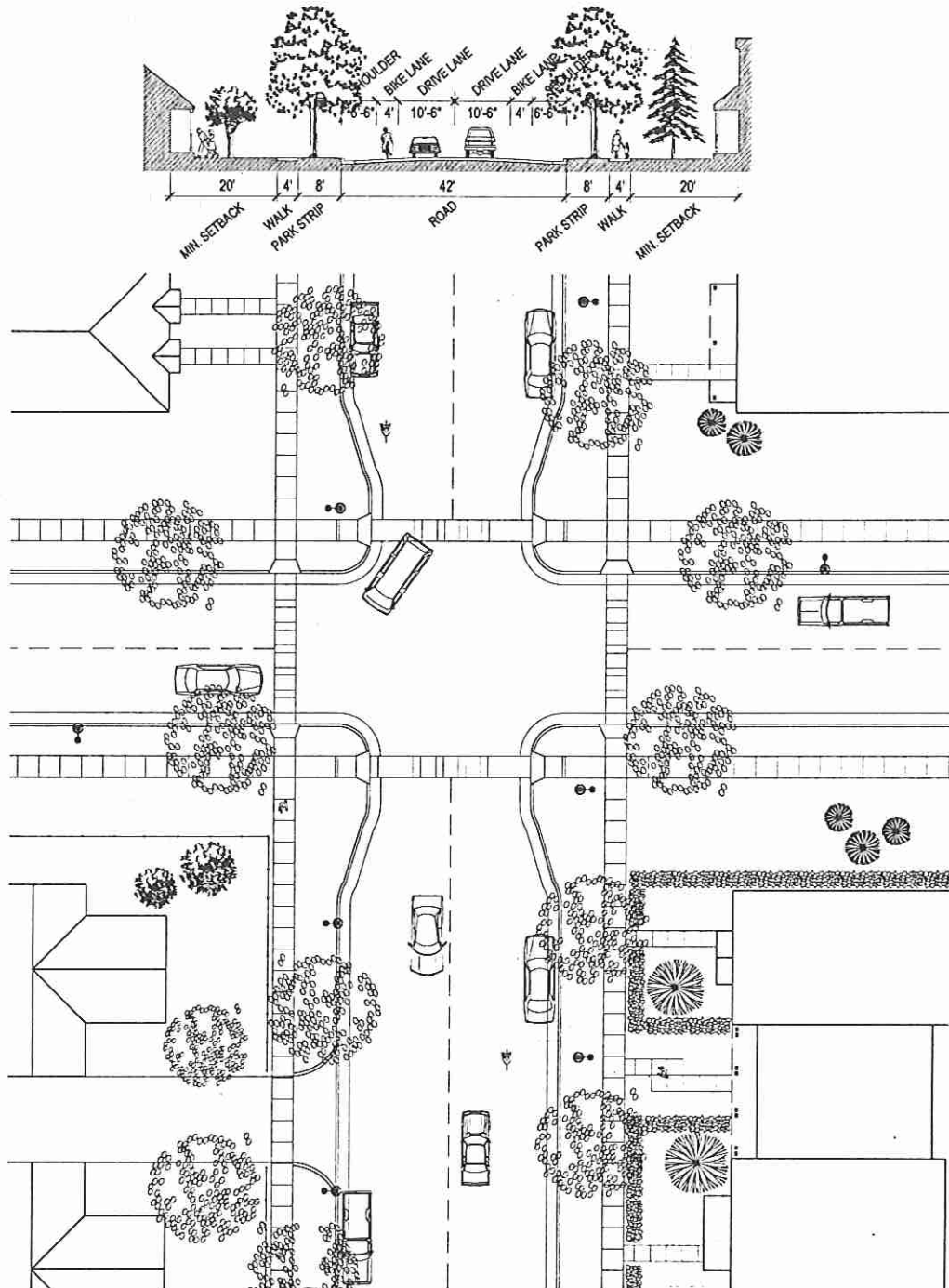
Affronting Building Facades

Buildings fronting onto the street should be one to four stories.

Paving Materials

Road surfaces should be paved with concrete or asphalt. Pedestrian crossings should be articulated with contrasting colors or paving materials, used consistently throughout the district.

Residential Boulevard



Residential Street

Designation

Minor residential street serving primarily local traffic, including pedestrian and bicycle traffic.

Design Criteria

56' Total Right-of-Way
35 m.p.h. Design Speed
25 m.p.h. Posted Speed

Setbacks

20' minimum setback. 35' maximum setback.

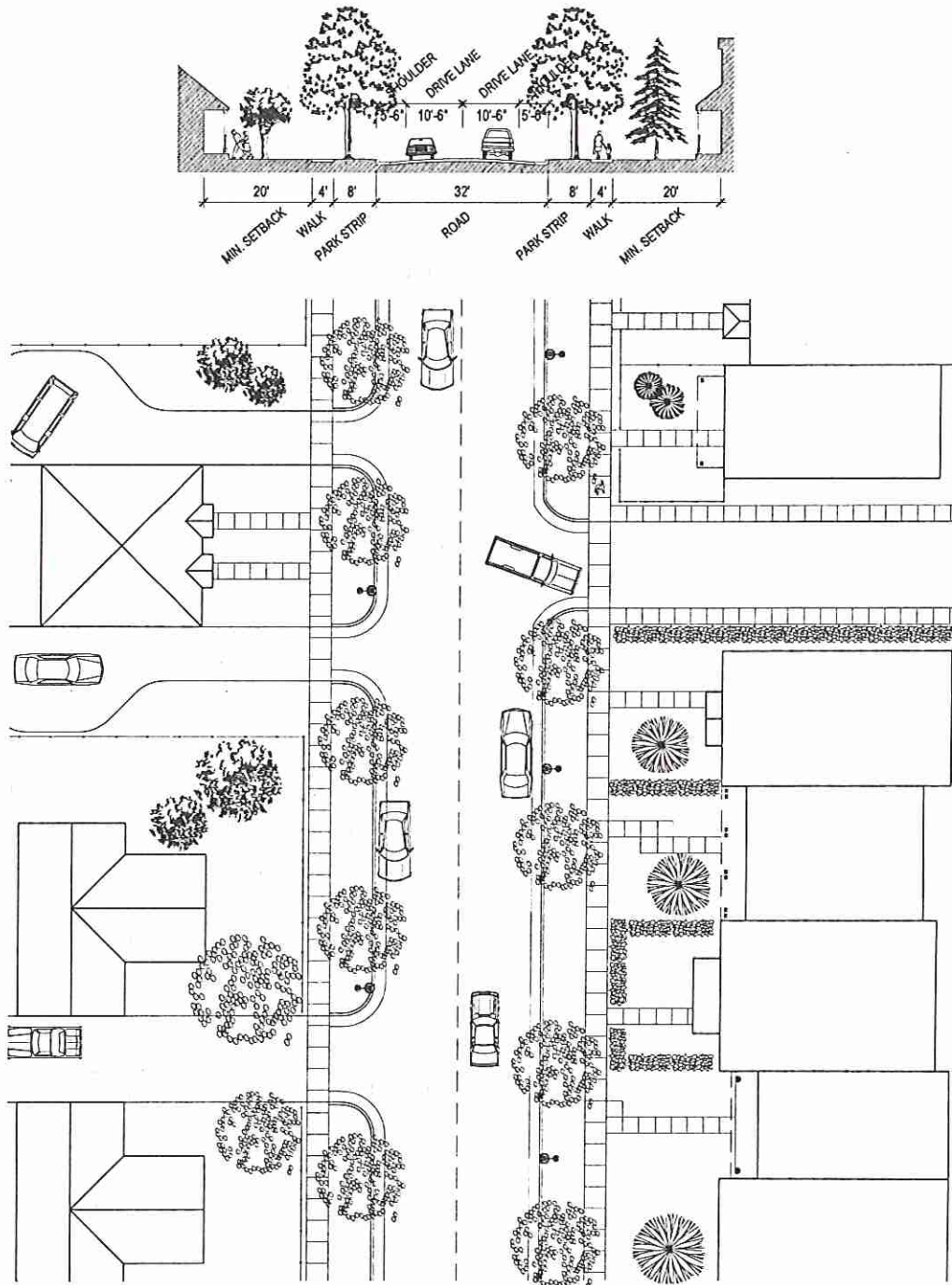
Affronting Building Facades

Buildings fronting onto the street should be one to four stories.

Paving Materials

Road surfaces should be paved with concrete or asphalt. Pedestrian crossings should be articulated with contrasting colors or paving materials, used consistently throughout the district.

Residential Street



Designation

Major collector street serving primarily local traffic, with significantly increased pedestrian activity and extensive on-street parking. This designation is contingent on the development of additional north/south streets parallel to the parkway that can relieve capacity requirements. Alternate design is to maintain two travel lanes with parallel parking.

Design Criteria

65' Total Right-of-Way
35 m.p.h. Design Speed
25 m.p.h. Posted Speed

Setbacks

0' minimum setback. 5' maximum setback for recessed entries up to three stories, and minimum setback of 15' above three stories.

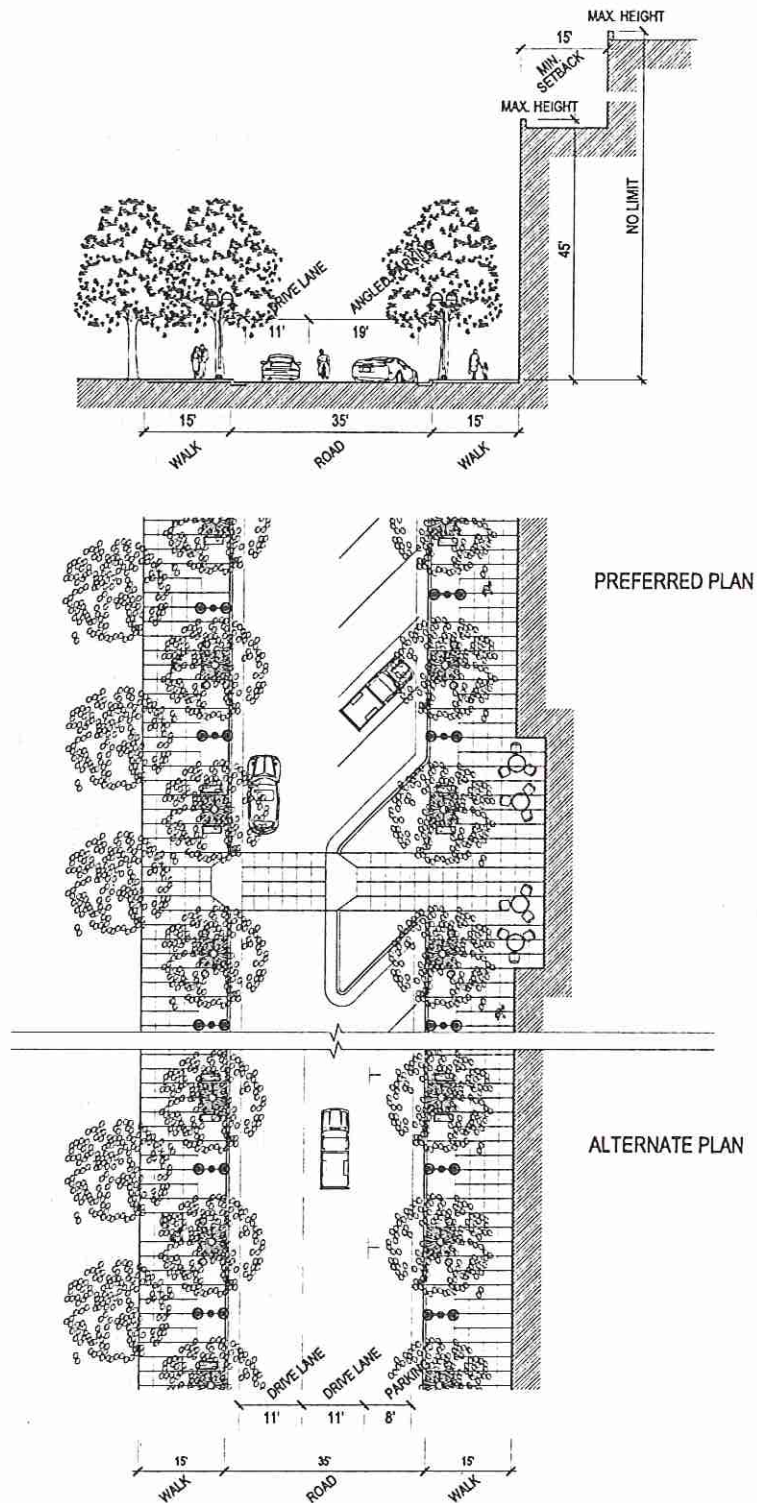
Affronting Building Facades

Buildings fronting onto the street should be two to three stories at the property line, with a minimum eave or cornice height of 25' and a maximum height of 45' at streetfront. Above three story setback, maximum height as regulated by zoning ordinance.

Paving Materials

Road surfaces should be paved with concrete to reduce surface heat, lower ambient air temperature, and reduce life-cycle costs and long-term maintenance requirements. Paving should comply with applicable Utah Department of Transportation (UDOT) concrete roadway standards. Pedestrian crossings should be articulated with contrasting colors or paving materials, used consistently throughout the district.

Centennial Parkway



Design Guidelines

Monroe Frontage Road

Designation

Minor collector street serving primarily local traffic in and through the downtown area, with anticipated increased pedestrian activity at the heart of the downtown area.

Design Criteria

90' Total Right-of-Way
35 m.p.h. Design Speed
30 m.p.h. Posted Speed

Setbacks

0' minimum setback. 5' maximum setback for recessed entries.

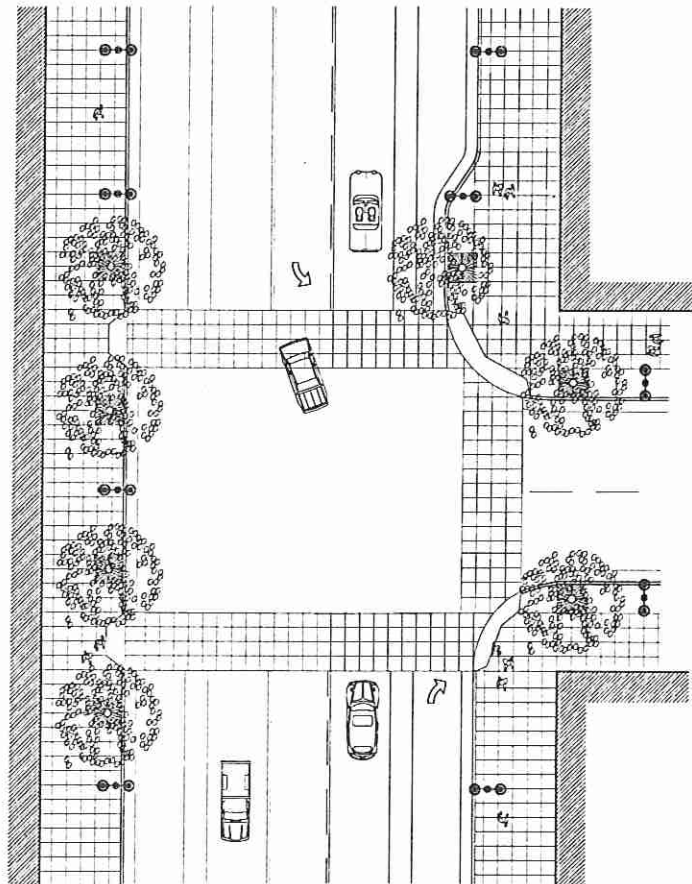
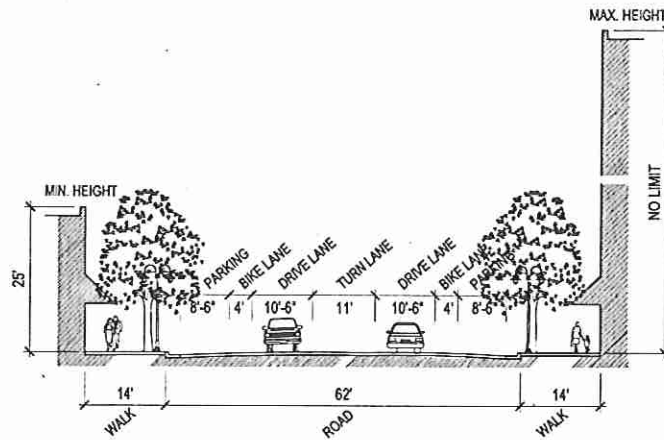
Affronting Building Facades

Buildings fronting onto the street should be two or more stories, with a minimum eave or cornice height of 25' and maximum height as regulated by zoning ordinance.

Paving Materials

Road surfaces should be paved with concrete to reduce surface heat, lower ambient air temperature, and reduce life-cycle costs and long-term maintenance requirements. Paving should comply with applicable Utah Department of Transportation (UDOT) concrete roadway standards. Pedestrian crossings should be articulated with contrasting colors or paving materials, used consistently throughout the district.

Monroe Frontage Road



Design Guidelines

Canal Multi-Use Trail

Designation

Separated multi-use trail corridor for non-motorized uses. Utilizes service road corridor at existing irrigation canals.

Design Criteria

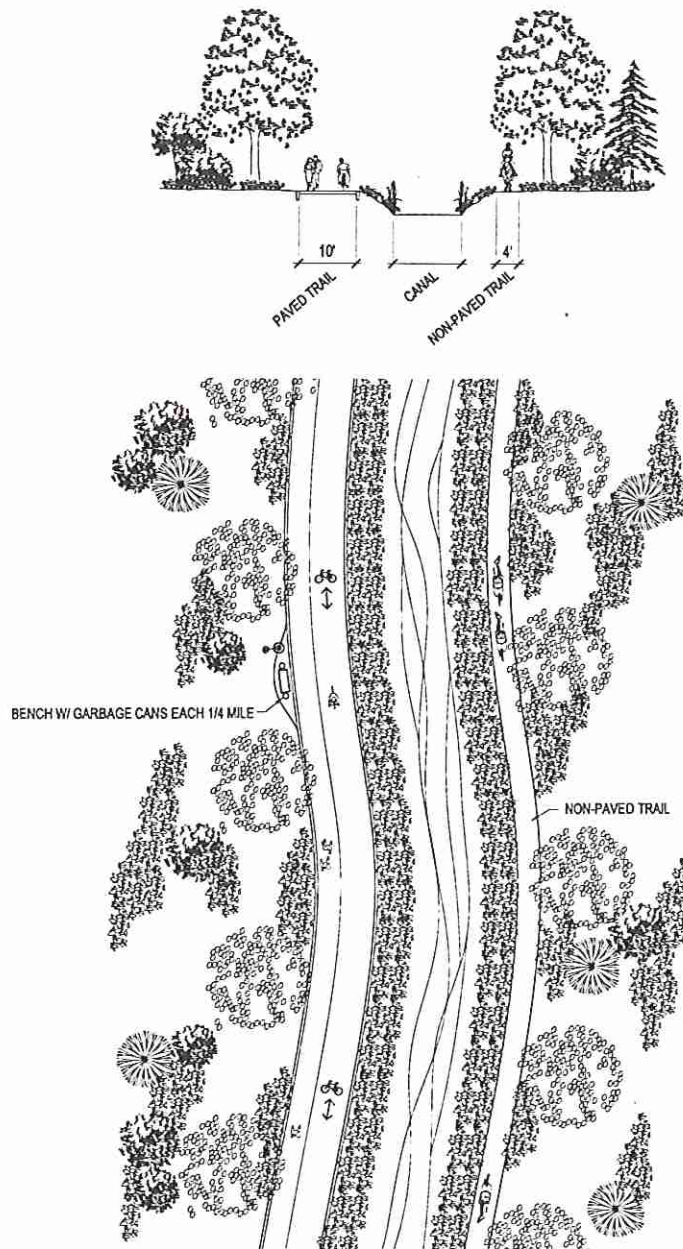
10' Paved Trail

4' Gravel Trail

Paving Materials

Paved surfaces can be either concrete or asphalt.

Canal Multi-Use Trail



Design Guidelines

Multi-Use Trail

Designation

Integrated multi-use trail for non-motorized uses.

Design Criteria

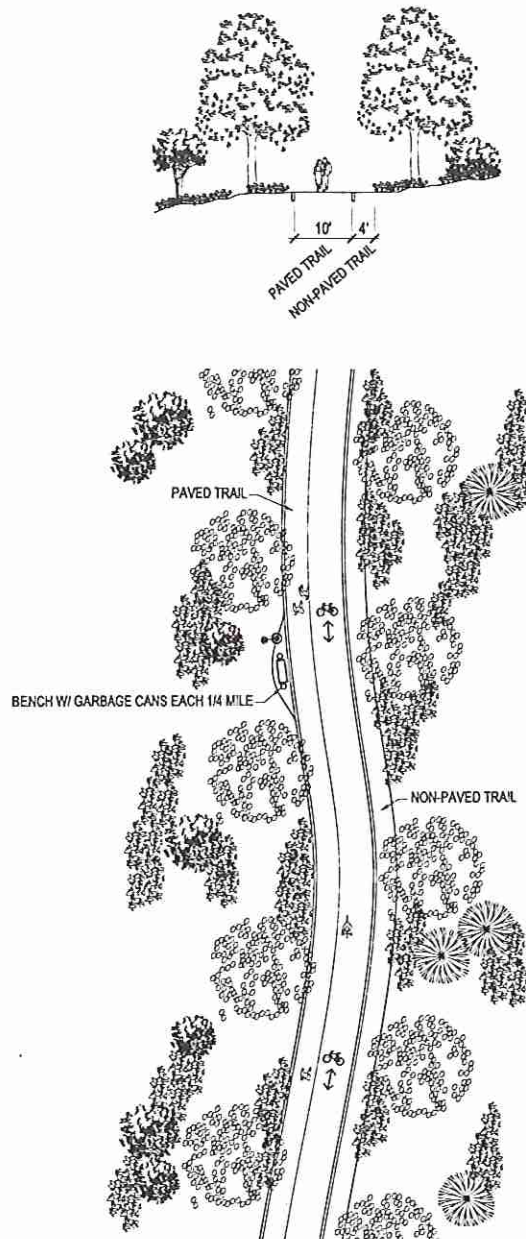
10' Paved Trail

4' Gravel Trail

Paving Materials

Paved surfaces can be either concrete or asphalt.

Multi-Use Trail



Overview of Action Plan

The following charts are an outline of recommendations of the illustrative plan and a proposed phasing scenario and plan of action to accomplish different objectives identified in the plan. The matrix includes four categories:

- **Action:** a brief summary of an action item identified in the Master Plan
- **Goal:** identification of which primary community goal would be achieved by implementation of a specific action (goals are listed in the overview of the Illustrative Plan section of this document)
- **Initiated By:** indicates whether the action is a publicly or privately initiated project or a partnership, and which groups or agencies should take the lead for project development
- **Time Frame:** indicates relative time frame for implementation—Immediate (up to 2 years), Short-Term (2–5 years), Mid-Term (5–10 years), and Long-Term (10–20 years), and Ongoing which includes projects that could occur any-time in 1-20 years and may span the over the entire time frame.

This outline is meant to be a general guide, and is adaptable as needs change and priorities shift, or as funding is available. Private development, for example, will be market driven. In an active market, certain mid- and long-range objectives may be met sooner. In a slow economy, certain public and private development may slow as funding can be more challenging, while demand for affordable housing may increase.

Implementation

Central Business/Retail District Action Plan

	Action	Goal	Participation By	Time Frame
1	Encourage ground floor retail development—especially restaurants, cafés and specialty shops—along Centennial Parkway, 10000 South and other proposed arterials and collectors to enliven street fronts	Economic growth and development	Businesses/Developers/Local Government	Ongoing
2	Retrofit or replace single use/single story retail developments throughout the district with more integrated, higher density mixed-use developments that include commercial office and/or residential uses on upper floors	Reduce travel demand	Developers/Local Government	Long-Term
3	Create additional policies and strategies to improve overall shopping experience in order to retain and expand current market base	Economic growth and development	Businesses/Local Government	Ongoing
4	Work with Economic Development Department to create incentive programs that will attract and retain a proportion of small, local businesses in all new retail developments	Broad, stable economic base	Businesses/Developers/Local Government	Ongoing
5	Develop incentive programs to work with existing developers to incorporate illustrative plan strategies into projects that are already approved	Economic growth and development	Developers/Local Government	Immediate
6	Encourage mixed-use development that includes retail and/or residential components within new commercial office developments.	Reduce travel demand	Developers/Local Government	Ongoing
7	Develop and expand transit ridership programs for commuting employees	Expand mobility options	Businesses/UTA	Ongoing
8	Provide changing facilities and secure storage for bicycling employees	Expand mobility options	Businesses	Ongoing
9	Focus new central business district residential development around Centennial Parkway to increase evening activity and maximize the use of the valuable community resource	Expand housing choices	Businesses/Developers/Local Government	Mid-Term
10	Develop requirements for an appropriate mix of affordable housing convenient to service sector jobs in the retail market	Expand housing choices	Developers/Local Government	Short-Term
11	Encourage mixed-use of residential with compatible office and retail uses within the same structure or development	Expand housing choices	Developers/Local Government	Ongoing
12	Develop design guidelines specific to residential components in central business district	Expand housing choices	Local Government	Immediate
13	Work with Economic Development Department to create incentives for attracting neighborhood services within the retail environment	Integrate existing neighborhoods	Businesses/Developers/Local Government	Short-Term
14	Address mobility impairments, including traffic congestion, limited transportation choice, and safety concerns	Expand mobility options	Local Government/UTA/UDOT	Long-Term
15	Balance the exclusive use of automobiles with alternative mobility choices such as transit, shuttle system, bicycles and walking	Expand mobility options	Local Government/UTA/UDOT	Long-Term
16	Develop a hierarchy of primary and secondary routes for conveyance systems: automobiles, transit, bicycles and pedestrians	Expand mobility options	Local Government	Immediate
17	Plan and develop a more tight and connected network of streets, roads and paths	Expand mobility options	Local Government	Short-Term
18	Develop a broad, integrated approach for trip reduction and management through cooperation with employers, UTA and Public Works	Reduce travel demand	Businesses/Local Government/UTA	Ongoing
19	Encourage a mixed-use development pattern that will reduce single-use trips	Reduce travel demand	Businesses/Developers/Local Government	Ongoing
20	Reduce conflict points between automobiles and pedestrians, and automobiles and bicycles through appropriate street and intersection design modifications	Expand mobility options	Local Government/UDOT	Short-Term
21	Explore options to install roundabout at intersection of 10000 South and Centennial Parkway based on positive findings and recommendation of traffic analysis	Expand mobility options	Local Government	Short-Term
22	Provide adequate parking to serve existing and new public and private developments	Economic growth and development	Businesses/Developers/Local Government	Ongoing
23	Encourage mixed-use developments that can use the same parking for different peak demands, and reduce the overall parking requirement	Reduce travel demand	Businesses/Developers/Local Government	Ongoing
24	Consolidate parking into shared parking districts, and consider special improvement districts to maintain landscaping and appearance of parking areas	Reduce travel demand	Businesses/Developers/Local Government	Ongoing
25	Locate parking at the sides and rear of buildings, and at block interiors	Expand mobility options	Businesses/Developers/Local Government	Ongoing
26	Consolidate driveways to reduce curb cuts, traffic impacts, and potential conflicts with pedestrians	Expand mobility options	Businesses/Developers/Local Government/UDOT	Ongoing
27	Create incentives and financing partnerships to facilitate construction of structured parking facilities	Economic growth and development	Businesses/Developers/Local Government/State and Federal Programs	Mid-Term
28	Develop long-term strategies for existing and proposed developments to consider the eventual redevelopment of surface parking lots	Economic growth and development	Businesses/Developers/Local Government	Long-Term
29	Provide water-conserving landscaping, especially shade trees—in existing and new parking lots to upgrade their appearance, improve air quality, and create a more pleasant environment	Preserve and enhance open space	Businesses/Developers/Local Government	Ongoing
30	Further develop City Hall block with cultural amenities as a formal terminus for Centennial Parkway	Greater connectivity of activity centers	Local Government	Mid-Term
31	Develop the south terminus of the Parkway as expansion and development occurs at South Town Mall—the terminus should be located closer to the physical park rather than across the parking lot	Greater connectivity of activity centers	Developers/Local Government	Long-Term
32	Provide shade trees and additional water-conserving landscaping to better define the perimeter of the Parkway, and to create places for seating and event staging	Preserve and enhance open space	Local Government	Short-Term
33	Expand seasonal events to include one or two activities during each season	Preserve and enhance open space	Local Government	Short-Term
34	Frame the outside perimeter of parkway streets with mixed-use development that activates the space and promotes extended daytime and evening use	Preserve and enhance open space	Developers/Local Government	Mid-Term
35	Locate support facilities such as public rest rooms, vendors, and staging areas at the perimeter to not detract from the monumentality of the space	Preserve and enhance open space	Local Government	Short-Term
36	Clean up the Neff's Grove area	Preserve and enhance open space	Local Government	Immediate
37	Provide intimate seating and small group gathering spaces in Neff's Grove	Preserve and enhance open space	Local Government	Short-Term
38	Add a water feature at Neff's Grove that will contribute to a more intimate, active setting	Preserve and enhance open space	Local Government	Short-Term
39	Utilize a community-based public art program to provide appropriately scaled art throughout all public park spaces	Increase cultural and entertainment activity	Local Government	Ongoing
40	Develop a closed loop local shuttle system to connect the Central Business and Retail District to the light rail station and the Expo Center	Greater connectivity of activity centers	Businesses/Local Government/UTA	Short-Term

Implementation

Transit Oriented Development District Action Plan

	Action	Goal	Participation By	Time Frame
1	Encourage ground floor retail development—especially restaurants, cafés and specialty shops—along 10000 South to enliven street fronts	Economic growth and development	Businesses/Developers/Local Government	Ongoing
2	Work with Economic Development Department to create incentive programs that will attract and retain a proportion of small, local businesses in all new retail developments	Broad, stable economic base	Businesses/Developers/Local Government	Ongoing
3	Locate commercial office space within easy walking distance—1/4 mile or less—from the transit hub	Integrate land uses with transit	Businesses/Developers/Local Government	Ongoing
4	Encourage mixed-use development that includes retail and/or residential components within new commercial office developments	Reduce travel demand	Developers/Local Government	Ongoing
5	Encourage transit ridership programs for commuting employees	Expand mobility options	Businesses/UTA	Ongoing
6	Provide changing facilities and secure storage for bicycling employees	Expand mobility options	Businesses	Ongoing
7	Allow mixed-use of residential with compatible office and retail uses within the same structure or development	Expand housing choices	Developers/Local Government	Ongoing
8	Develop design guidelines specific to residential components in the Transit Oriented Development District	Expand housing choices	Local Government	Immediate
9	Work with Economic Development Department to create incentives for attracting neighborhood services within the retail environment	Integrate existing neighborhoods	Businesses/Developers/Local Government	Short-Term
10	Provide greater access to transit and shuttle systems for those who have limited access to automobile—either by choice or by life stage	Integrate land uses with transit	Local Government/UTA	Ongoing
11	Manage conflicts between automobiles and pedestrians through improved street and intersection design, recognizing that pedestrian traffic increases in close proximity to a transit hub	Expand mobility options	Local Government/UDOT	Short-Term
12	Improve the light rail access road and Sego Lily/10000 South and explore a more direct visual and pedestrian link from downtown employment centers to the TRAX station	Integrate land uses with transit	Developers/Local Government/UTA	Mid-Term
13	Extend 10200 South east to the light rail corridor, and provide a connection to 10600 on the South	Expand mobility options	Local Government	Short-Term
14	Plan and develop a more tight and connected network of streets, roads and paths	Expand mobility options	Local Government	Short-Term
15	Design intersections for safe pedestrian crossings	Expand mobility options	Local Government/UDOT	Short-Term
16	Encourage a mixed-use development pattern that maximizes transit system use	Reduce travel demand	Businesses/Developers/Local Government	Ongoing
17	Explore a grade-separated crossing for the Dimple Dell Parkway trail at the light rail corridor	Preserve and enhance open space	Local Government/UTA	Short-Term
18	Develop an effective community trail system using the existing service road right-of-way along the irrigation canals	Preserve and enhance open space	Local Government/Canal Companies	Mid-Term
19	Provide adequate parking to serve new public and private developments	Economic growth and development	Businesses/Developers/Local Government	Ongoing
20	Encourage mixed-use developments that can use the same parking for different peak demands, and reduce the overall parking requirement	Reduce travel demand	Businesses/Developers/Local Government	Ongoing
21	Consolidate parking into shared parking districts, and consider special improvement districts to maintain landscaping and appearance of parking areas	Reduce travel demand	Businesses/Developers/Local Government	Ongoing
22	Locate parking at the sides and rear of buildings, and at block interiors	Expand mobility options	Businesses/Developers/Local Government	Ongoing
23	Consolidate driveways to reduce curb cuts, traffic impacts, and potential conflicts with pedestrians	Expand mobility options	Businesses/Developers/Local Government/UDOT	Ongoing
24	Modify Park & Ride facilities and redevelop surface parking lots with structured parking to accommodate existing parking needs and facilitate better pedestrian access from new transit oriented developments	Integrate land uses with transit	Businesses/Developers/Local Government/UTA/State and Federal Programs	Mid-Term
25	Provide water-conserving landscaping, especially shade trees—in existing and new parking lots to upgrade their appearance, improve air quality, and create a more pleasant environment	Preserve and enhance open space	Businesses/Developers/Local Government	Ongoing
26	Utilize water-conserving landscaping elsewhere throughout new developments	Preserve and enhance open space	Businesses/Developers/Local Government	Ongoing
27	Provide trails and connections to Dimple Dell Regional Park to take full advantage of its many recreational uses	Preserve and enhance open space	Local Government	Short-Term
28	Utilize a community-based public art program to provide appropriately scaled art throughout all public park spaces	Increase cultural and entertainment activity	Local Government	Ongoing
29	Preserve the attractive environment and visual access to the Lake Hills Cemetery	Preserve and enhance open space	Local Government/Property Owners	Ongoing
30	Utilize the asset of the High School as a community recreational resource	Preserve and enhance open space	Local Government/School District	Ongoing
31	Develop a closed loop local shuttle system to connect the light rail station to the Central Business and Retail District and the Expo Center	Greater connectivity of activity centers	Businesses/Local Government/UTA	Short-Term

Entertainment/Business District Action Plan

	Action	Goal	Participation By	Time Frame
1	Encourage ground floor retail development—especially restaurants, cafés and specialty shops—along 10000 South to enliven street fronts	Economic growth and development	Businesses/Developers/Local Government	Ongoing
2	Work with Economic Development Department to create incentive programs that will attract and retain a proportion of small, local businesses in all new retail developments	Broad, stable economic base	Businesses/Developers/Local Government	Ongoing
3	Locate commercial office space within easy walking distance—1/4 mile or less—from the transit hub	Integrate land uses with transit	Businesses/Developers/Local Government	Ongoing
4	Encourage mixed-use development that includes retail and/or residential components within new commercial office developments	Reduce travel demand	Developers/Local Government	Ongoing
5	Encourage transit ridership programs for commuting employees	Expand mobility options	Businesses/UTA	Ongoing
6	Provide changing facilities and secure storage for bicycling employees	Expand mobility options	Businesses	Ongoing
7	Allow for greatly increased density within a 1/4-mile zone of the light rail station	Integrate land uses with transit	Developers/Local Government	Immediate
8	Develop guidelines for an appropriate mix of affordable housing convenient to service sector jobs in the retail market	Expand housing choices	Developers/Local Government	Short-Term
9	Encourage mixed-use of residential with compatible office and retail uses within the same structure or development	Expand housing choices	Developers/Local Government	Ongoing
10	Develop design guidelines specific to residential components in the Transit Oriented Development District	Expand housing choices	Local Government	Immediate
11	Work with Economic Development Department to create incentives for attracting neighborhood services within the retail environment	Integrate existing neighborhoods	Businesses/Developers/Local Government	Short-Term
12	Provide greater access to transit and shuttle systems for those who have limited access to automobile—either by choice or by life stage	Integrate land uses with transit	Local Government/UTA	Ongoing
13	Manage conflicts between automobiles and pedestrians through improved street and intersection design, recognizing that pedestrian traffic increases in close proximity to a transit hub	Expand mobility options	Local Government/UDOT	Short-Term
14	Improve the light rail access road and Sego Lily/10000 South and explore a more direct visual and pedestrian link from downtown employment centers to the TRAX station	Integrate land uses with transit	Developers/Local Government/UTA	Mid-Term
15	Extend 10200 South east to the light rail corridor, and provide a connection to 10600 on the South	Expand mobility options	Local Government	Short-Term
16	Plan and develop a more tight and connected network of streets, roads and paths	Expand mobility options	Local Government	Short-Term
17	Design intersections for safe pedestrian crossings	Expand mobility options	Local Government/UDOT	Short-Term
18	Encourage a mixed-use development pattern that maximizes transit system use	Reduce travel demand	Businesses/Developers/Local Government	Ongoing
19	Explore a grade-separated crossing for the Dimple Dell Parkway trail at the light rail corridor	Preserve and enhance open space	Local Government/UTA	Short-Term
20	Develop an effective community trail system using the existing service road right-of-way along the irrigation canals	Preserve and enhance open space	Local Government/Canal Companies	Mid-Term
21	Provide adequate parking to serve new public and private developments	Economic growth and development	Businesses/Developers/Local Government	Ongoing
22	Encourage mixed-use developments that can use the same parking for different peak demands, and reduce the overall parking requirement	Reduce travel demand	Businesses/Developers/Local Government	Ongoing
23	Consolidate parking into shared parking districts, and consider special improvement districts to maintain landscaping and appearance of parking areas	Reduce travel demand	Businesses/Developers/Local Government	Ongoing
24	Locate parking at the sides and rear of buildings, and at block interiors	Expand mobility options	Businesses/Developers/Local Government	Ongoing
25	Consolidate driveways to reduce curb cuts, traffic impacts, and potential conflicts with pedestrians	Expand mobility options	Businesses/Developers/Local Government/UDOT	Ongoing
26	Modify Park & Ride facilities and redevelop surface parking lots with structured parking to accommodate existing parking needs and facilitate better pedestrian access from new transit oriented developments	Integrate land uses with transit	Businesses/Developers/Local Government/UTA/State and Federal Programs	Mid-Term
27	Provide water-conserving landscaping, especially shade trees—in existing and new parking lots to upgrade their appearance, improve air quality, and create a more pleasant environment	Preserve and enhance open space	Businesses/Developers/Local Government	Ongoing
28	Utilize water-conserving landscaping elsewhere throughout new developments	Preserve and enhance open space	Businesses/Developers/Local Government	Ongoing
29	Provide trails and connections to Dimple Dell Regional Park to take full advantage of its many recreational uses	Preserve and enhance open space	Local Government	Short-Term
30	Utilize a community-based public art program to provide appropriately scaled art throughout all public park spaces	Increase cultural and entertainment activity	Local Government	Ongoing
31	Preserve the attractive environment and visual access to the Lake Hills Cemetery	Preserve and enhance open space	Local Government/Property Owners	Ongoing
32	Utilize the asset of the High School as a community recreational resource	Preserve and enhance open space	Local Government/School District	Ongoing
33	Develop a closed loop local shuttle system to connect the light rail station to the Central Business and Retail District and the Expo Center	Greater connectivity of activity centers	Businesses/Local Government/UTA	Short-Term

Appendix

Appendix A – Schedule of Shared Parking

Schedule of Shared Parking						
General Use Classification	Weekdays			Weekends		
	Midnight – 7:00 am	7:00 am – 6:00 pm	6:00 pm – Midnight	Midnight – 7:00 am	7:00 am – 6:00 pm	6:00 pm – Midnight
Office/Light Industrial	5%	100%	5%	0%	5%	0%
Retail	0%	100%	80%	0%	100%	60%
Restaurant	50%	70%	100%	70%	45%	100%
Hotel	100%	65%	100%	100%	65%	100%
Residential	100%	50%	80%	100%	75%	75%
Theater/Entertainment	5%	20%	100%	5%	50%	100%
Place of Worship	0%	30%	50%	0%	100%	75%

Appendix

Appendix B – Traffic Impact Analysis

The Traffic Impact Analysis, prepared by Fehr & Peers Associates, Inc., and dated March 20, 2002, is available under separate cover, and is incorporated herein by reference.

Appendix

Appendix C – Economic Analysis

Sandy Downtown Economic Analysis

Future Retail and Commercial Demand

Retail Market Analysis

The analysis of the market for retail development in the Sandy Downtown focused on employment population, households, and income trends anticipated in the area. This retail market study builds on the demographic and housing evaluations presented earlier. It further develops the following additional parts:

1. Definition of the Trade area of the Sandy Downtown.
2. Projections of Demand, Supply, and Unmet Demand for Retail Goods.
3. Computations of the Requirements of Retail Space Required to Support the Anticipated Retail Demand.
4. Presentation of a likely Development Profile

Retail Trade Area

The Sandy Downtown trade area is defined as the following:

- Primary Trade Area - population within a 1-10 mile drive from the area, which should represent 70% to 80% of total sales.
- Secondary Trade Area - population within a 15-mile drive from the area, which should represent 15% to 20% of total sales.

Population - 2000

Population information allows you to quantify the market size and measure future growth. Population is defined as all living persons in a geographic area. Group quarters include non-household living arrangements such as military barracks, college dormitories, long-term health care facilities, group homes, boarding houses, prisons, and jails.

POPULATION	5 mile	10 mile	15 mile
2005 Population Projection	264,111	613,255	930,937
2000 Population Estimate	245,161	584,389	888,655
1990 Census Population	175,165	474,936	737,744
2000 Population Per Square Mile	3,123	1,861	1,257
2000 Group Quarters Population	3,166	5,092	11,343

Households - 2000

Households consist of one or more persons who live together in the same housing unit, regardless of their relationship to each other. Households include all occupied housing units.

HOUSEHOLDS	1 mile	5 mile	10 mile
2000 Average Household Size	3.33	3.06	2.87
2005 Household Projection	80,536	204,206	325,279
2000 Household Estimate	72,678	189,488	303,631
1990 Households	49,071	145,778	240,532

Income - 2000

Income is a good indicator of the spending power of the market. Per Capita Income includes the income of all persons 15 years old and over. Median Income divides the income distribution into two equal parts, one-half falling above the median and one-half below.

INCOME - 2000	5 mile	10 mile	15 mile
% Under \$10,000	3.1	3.6	5.1
% \$10,000-\$14,999	2.4	2.9	4.1
% \$15,000-\$24,999	7.7	9.4	11.1
% \$25,000-\$34,999	11.2	13.2	14.1
% \$35,000-\$49,999	19.4	20.9	20.5
% \$50,000-\$74,999	26.4	24.5	22.5
% \$75,000-\$99,999	15.5	13.1	11.5
% \$100,000-\$149,000	11.3	9.4	8.3
% \$150,000+	2.9	2.9	2.7
2000 Per Capita Income	\$ 19,748	\$ 20,247	\$ 20,014
2000 Average Household Income	\$ 66,335	\$ 62,207	\$ 58,319
2000 Median Household Income	\$ 56,460	\$ 52,397	\$ 48,414

Population by age - 1999

Population by age provides valuable information as to the relative maturity or youth of a particular market. Median age divides the age distribution into two equal parts, one-half falling below the median and one-half above.

POPULATION BY AGE - 2000	1 mile	5 mile	10 mile
% Under Age 5	10.0	9.8	9.6
% Age 5-14	20.4	18.8	17.4
% Age 15-17	6.8	6.2	5.8
% Age 18-20	5.0	5.0	5.2
% Age 21-24	5.8	6.5	7.1
% Age 25-34	13.5	14.0	14.3
% Age 35-44	16.1	15.0	14.4
% Age 45-54	12.3	12.1	11.4
% Age 55-64	5.2	6.4	6.6
% Age 65-74	2.7	3.6	4.2
% Age 75-84	1.6	2.0	2.9
% Age 85 +	0.5	0.6	1.0
Average Age of Total Population	29.1	30.3	31.4
Median Age of Total Population	26.4	28.1	28.7

Projections of Demand for Retail Expenditures

These projections are based on annualized data from the Consumer Expenditure Survey, and are based on the income levels and expenditure patterns of the households in the retail market area.

5 Mile Market Area

Total Retail Expenditures - 2000	Retail Sales	Potential Retail Sales
	\$/HH	(\$000)
Five Mile Market Area		
Total Retail Expenditures	\$17,548	\$1,274,890
Food Service	5,269	382,776
Apparel & Services	1,338	97,207
Drug	481	34,978
Transportation	5,368	390,028
Leisure & Entertainment	1,760	127,893
Home Furnishings	2,704	196,484
Other Retail Expenditures	627	45,526

10-Mile Market Area

Total Retail Expenditures - 2000	Retail Sales	Potential Retail Sales
	\$/HH	(\$000)
Ten Mile Market Area		
Total Retail Expenditures	\$ 17,214	\$ 3,259,760
Food Service	\$ 5,215	\$ 987,530
Apparel & Services	\$ 1,312	\$ 248,430
Drug	\$ 490	\$ 92,784
Transportation	\$ 5,216	\$ 987,739
Leisure & Entertainment	\$ 1,709	\$ 323,667
Home Furnishings	\$ 2,647	\$ 501,201
Other Retail Expenditures	\$ 625	\$ 118,408

15 Mile Market Area

Total Retail Expenditures - 2000	Retail Sales	Potential Retail Sales
	\$/HH	(\$000)
Fifteen Mile Market Area		
Total Retail Expenditures	16,418	4,985,383
Food Service	5,048	1,532,770
Apparel & Services	1,250	379,558
Drug	481	146,020
Transportation	4,926	1,495,921
Leisure & Entertainment	1,609	488,509
Home Furnishings	2,493	756,908
Other Retail Expenditures	612	185,697

Retail Category Notes:

The Food Service category includes dollars spent on groceries, dollars spent dining out and dollars spent on alcoholic beverages.

Apparel & Services category of retail expenditures includes dollars spent on all apparel, footwear, jewelry and other apparel and services.

Drug/Medicines category of retail expenditures includes dollars spent on prescription drugs and personal care products.

Transportation category of retail expenditures includes dollars spent on automotive products and services, and travel.

Leisure & Entertainment category of retail expenditures includes dollars spent on books and periodicals pet care, sporting goods, children's toys, video purchase/rental, and other equipment.

The Home Furnishings/Improvement category includes major appliances, furniture, house wares, home improvement, and home services.

Retail Center Classifications

Retail Centers are typically classified according to the type and size of their major or "anchor" tenants, and the amount of "leasable" area they provide. The size of the retail center would also determine the number of people required in the "trade area" necessary to support the center. The classification and glossary of terms used in this report and by the "Shopping Center Directory, are as follows:¹

Anchors

The major retail outlets that generally are the largest in terms of square footage and are important in establishing the market positioning strategy of the center as well as type of center.

Auto Mall

A strip center consisting of retail stores aimed at the needs of automobiles such as auto dealerships, oil changes, and auto parts.

Community Center

Has a wider range of facilities for the sale of soft lines (apparel) and hardlines (hardware, appliances, etc.) than the neighborhood center. It is built around a junior department store, variety store or discount department store although it may have a strong specialty store. The typical size of a community center is 150,000 square feet. In practice a community center can range from 100,000 to 300,000 square feet. A community center is an intermediate shopping center and the most difficult to estimate for size, trade area and pulling power.

Convenience Center

A small strip center that provides convenience goods (food, drug, etc.) and/or services (laundry, cleaners, copying, etc.) for the busy one-stop-shopper.

Discount

A center in which a discount store is the major tenant in the development with additional retail space consisting of smaller retail tenants and/or a supermarket. This type of center usually draws a lower socioeconomic group as compared to the off-price center. They are considered part of the Value Retail group of centers.

Factory Outlet

A center consisting of manufacturer's retail outlet facilities where goods are sold directly to the public in stores owned and operated by manufacturers. In contrast to factory outlets of the past typically found at the factory site, today's factory outlet stores are locating in mall or center settings and often sell first-quality, current season merchandise. Factory outlet malls draw a combination of middle and lower socioeconomic group customers and often include some off-price stores as well as factory outlets. They are considered part of the Value Retail group of centers.

Festival/Entertainment

A center consisting of primarily food and specialty retailers and entertainment facilities. Many times center may be an adaptive reuse or mixed use development and has a heavy concentration of tourist traffic.

¹ National Research Bureau, 2001

GLA - Gross Leasable Area in square feet

The total floor area designed for tenant occupancy and exclusive use, including any basements, mezzanines, or upper floors, expressed in square feet and measured from the centerline of joining partitions and from outside wall faces. GLA is all the area for which tenants pay rent. (For our purposes, to get an idea of total center size, square footage of anchor stores should also be included. GLA for mixed use developments should include retail space only.)

Home Improvement

A center anchored by a home improvement retailer or with a concentration of home improvement/hardware specialty retailers.

Market Positioning Strategy

A marketing strategy to promote an "image" of the center to its patrons as to the types of anchors and tenants, and therefore, merchandise that may be found there. The market positioning strategy relates how the center management positions the center in the marketplace via its anchor/tenant mix.

Mixed Use Development

A relatively large-scale real estate project with 1) three or more significant revenue-producing uses (such as retail, office, residential, hotel/motel, recreation) which are mutually supporting and developed as a unit; 2) significant functional and physical integration of project components, including uninterrupted pedestrian connections; and 3) development in conformance with a coherent plan.

Neighborhood Center

Provides for the sales of convenience goods (food, drugs, etc.) and personal services (laundry, dry cleaning, etc.) for day-to-day living needs of the immediate neighborhood with a supermarket being the principal tenant. In theory, the typical GLA is 50,000 square feet. In practice, the GLA may range from 30,000 to 100,000 square feet.

Off Price

A center consisting of retail stores that offer brand name goods found in conventional specialty and department stores at 20 percent to 70 percent below manufacturer's suggested prices. The goods found in an off price store are generally of higher quality than those found at a discount store. Off price centers draw primarily customers of the middle and middle-upper socioeconomic group. They are considered part of the Value Retail group of centers.

Power Center

An open, strip center with three to five anchors accounting for more than 75% of the GLA with the GLA of a few smaller tenants accounting for the balance.

Primary Market Population

The population, which is located within the center's primary trade area. The primary trade area is the geographic area around the center from which

Regional Center

Provides shopping goods, general merchandise, apparel, furniture and home furnishings in full depth and variety. It is built around the full-line department store, with a minimum GLA of 100,000 square feet, as the major drawing power. For even greater comparative shopping, two, three or more department stores may be included. In theory a regional center has a GLA of 400,000 square feet, and can range from 300,000 to more than 1,000,000 square feet. Regional centers in excess of 750,000 square feet GLA with three or more department stores are considered super regional centers.

Service-Oriented

A center consisting predominantly of service-oriented retailers such as optical, dental, repair, health services, legal services, etc.

Shopping Center

A group of architecturally unified commercial establishments built on a site, which is planned, developed, owned, and managed as an operating unit, related in its location, size and type of shops to the trade area that the unit serves. The unit provides on-site parking in definite relationship to the types and total size of the stores. NRB considers such a unit a shopping center if it contains three or more stores.

Specialty Center

Centers that are quite diverse in thematic format, size and market orientation but share common features that distinguish them from other centers. They employ a unifying theme in architectural design, which is carried out by the individual shops; anchored by restaurants and entertainment facilities rather than department stores or supermarkets; strongly appeal to tourists as well as local shoppers; and their tenants typically offer unusual merchandise.

Strip Center

A line of stores often tied together by a canopy over the sidewalk, which runs along the fronts of the stores. A configuration of an open shopping center (non enclosed), which may vary greatly in size.

Super Regional Center

Provides for an extensive variety of general merchandise. It is built around three or more major department stores. In theory, a super regional center has a GLA of 750,000 square feet and in practice ranges upwards of 1,000,000 square feet. The major department stores generally have a square footage of 100,000 square feet each.

Upscale/Fashion

A center comprised of a concentration of apparel shops, boutiques, and handcraft shops carrying selected merchandise, usually of high quality and high price. An upscale/fashion center may include one or more small specialty department stores and gourmet food and food service. These centers are most often located in upper middle and higher income areas.

Value Retail

A term used to aggregate centers that have a market positioning strategy of discount, off price or factory outlet.

Retail Center Examples

These examples are based on generally accepted industry definitions of shopping centers, and use well know local examples.

Super Regional Mall

A Super Regional Mall generally provides for an extensive variety of general merchandise. It is built around three or more major department stores. In theory, a super regional center has a GLA of 750,000 square feet and in practice ranges upwards of 1,000,000 square feet. The major department stores generally have a square footage of 100,000 square feet each. The following examples are based on generally accepted industry definitions of shopping centers.

Super Regional Mall	# In SL/Og Metro Area 6	Trade Area Population 300,000+	Typical Gross Leasable Area 500,000 – 1.5M +	Typical Anchor Tenant 3 or more Full-line Department Stores
South Town			1.2 M	J.C. Penney Mervyn's Meyer & Frank (ZCMI) Dillards
Fashion Place			.971M	Nordstrom's Dillard's Sears
Valley Fair			.608M	J.C. Penney Mervyn's Meyer & Frank (ZCMI)
Cottonwood			.906M	J.C. Penney Meyer & Frank (ZCMI)

Source: Urban Land Institute, Shopping Center Directory – 2000, Bonneville Research 2001

Regional Mall Examples

A Regional Center generally provides shopping goods, general merchandise, apparel, furniture and home furnishings in full depth and variety. It is built around the full-line department store, with a minimum GLA of 100,000 square feet, as the major drawing power. For even greater comparative shopping, two, three or more department stores may be included. In theory a regional center has a GLA of 400,000 square feet, and can range from 300,000 to more than 1,000,000 square feet. Regional centers in excess of 750,000 square feet GLA with three or more department stores are considered super regional centers. The following examples are based on generally accepted industry definitions of shopping centers, and use well know local examples.

Regional Malls	# In SL/Og Metro Area 9	Trade Area Population 150,000 +	Typical Gross Leasable Area 300,000 – 900,000	Typical Anchor Tenant 2 or more full-line Department Stores
Crossroads			.635M	Nordstrom's

ZCMI Center	.557M	Mervyn's Meyer & Frank (ZCMI)
-------------	-------	----------------------------------

Source: Urban Land Institute, Shopping Center Directory – 2000, Bonneville Research 2001

Community Shopping Center Examples

A Community Center generally has a wider range of facilities for the sale of soft lines (apparel) and hardlines (hardware, appliances, etc.) than the neighborhood center. It is built around a junior department store, variety store or discount department store although it may have a strong specialty store. The typical size of a community center is 150,000 square feet. In practice a community center can range from 100,000 to 300,000 square feet. A community center is an intermediate shopping center and the most difficult to estimate for size, trade area and pulling power. The following examples are based on generally accepted industry definitions of shopping centers and are the type of retail center probably most appropriate in scale for Sandy City.

	# In SL/Og Metro Area	Trade Area Population	Typical Gross Leasable Area	Anchor Tenant 50,000 sq ft +
Community Shopping Centers	49	40,000 -150,000	30,000 – 100,000	Discount Department Store Food Store
Family Center Mid Valley			.872M	ShopKo Media Play
Family Center @ FT. Union			.622M	Mervyn's Smith's Wal-Mart Media Play
South Town Marketplace			.350M	Super Target
Sugar House			.349M	ShopKo Toys R Us
Brickyard Plaza			.283M	Mervyn's
Foothill Village			.277M	None
Trolley Square			.239M	None
Sandy Mall			.235M	None
Factory Stores of Park City			.219M	None
Five Points			.188M	None
Factory Stores of Draper			.186M	VF Factory Outlet
Family Center East Downtown			.175M	Fred Meyer
Olympus Hills			.160M	None

Source Colliers CRG - 2000, Bonneville Research 2001

Retail Center Per Capita Floor Space

The total floor area designed for tenant occupancy and exclusive use, including any basements, mezzanines, or upper floors, expressed in square feet and measured from the centerline of joining partitions and from outside wall faces. GLA is all the area for which tenants pay rent. The retailers in the center need generate retail sales at acceptable levels to sustain business. The following are generally accepted industry standards for the population (Per Capita) required to support the various classifications of retail centers, and the amount of square feet supportable at a Sandy Downtown location in Sandy City. Population estimates are the number of persons contained in a 10 and 15-mile radius from the Sandy Downtown and State Street location in Sandy City.

Retail Center Per Capita Floor Space			
	Per Capita Floor Space	Supportable Sq Ft (f) 10 Mile Pop 2005 @ 613,255	Supportable Sq Ft (f) 15 Mile Pop 2005 @ 930,937
Super Regional Mall	3.97	154,500	234,500
Regional Mall @ .600M sq ft	3.55	172,750	262,000
Community Center @ 60,000 sq ft	6.29	97,500	148,000
Neighborhood Center @ 25,000 sq ft	2.63	233,000	354,000

Source: Urban Land Institute, Shopping Center Directory – 2000, Bonneville Research 2001

Characteristics of Community Center Shopping Center Tenants

The following types of retailers are typically found in Community Center level of retail centers. The median Gross Leasable Area (GLA) and Median Sales per square foot of store space, and Average store sales are shown.

	Median GLA (SF)	Median Sales/SF	Average Store Sales
Supermarket	60,000 sf	\$321	\$10,025,000
Drug Store	9,176	\$241	\$2,211,000
Liquor Store	2,800	\$217	\$608,000
Restaurant with liquor	3,375	\$176	\$594,000
Restaurant with out liquor	2,277	\$183	\$417,000
Women's Specialty	1,461	\$256	\$374,000
Women's Ready to Wear	2,975	\$123	\$366,000
Cards and gifts	2,561	\$136	\$348,000
Women's Specialty	1,461	\$256	\$374,000
Video Rental	3,156	\$79	\$249,000
Jewelry	1,006	\$280	\$282,000
Unisex Hair	1,200	\$163	\$196,000
Beauty Salon	1,200	\$139	\$167,000
Dry Cleaner	1,434	\$102	\$146,000
Bank	3,124		
Finance Company	1,600		
Medical/Dental	1,461	\$143	
Travel Agent	1,016		

Source: Urban Land Institute, Bonneville Research, 2001

CONSUMER SHOPPING PATTERNS

A shopping center is not just another piece of real estate. It is a source of employment, a shaper of community patterns and character, and it is a source of employment and tax revenue to the City.

Consumer shopping patterns reflect the social reasons why people visit shopping centers, their behavioral patterns as well as management's and the public's attitudes and reactions to them. Customer behavior is typically reflected in the retail focal points of the community in which they are located and therefore typically include the following:

- Time spent shopping
- Customer traffic patterns
- Customer travel distances
- Customer shopper attitudes

Given the tremendous impact of location on a shopping center's success, property owners and retailers will want to make their decisions with as much information and insight as possible including: such as demographic statistics and traffic patterns.

The question really comes down to just giving customers what they want. Customers vote what products they want, and those retailers who provide what they want get the sales. If they don't, someone else is filling that customers need.

An understanding of the interaction of land-use and transportation facilities can aid Sandy in designing transportation systems that try to achieve desirable growth patterns. The traditional shopping mall model is tied with the private ownership of automobiles. As people use public transportation to commute or travel, locating retail outlets in mass transportation centers is emerging as a new anchor strategy for shopping centers - a new plan, turning mass transportation centers into consumer shopping stops.

A natural strategy is to place shopping centers in direct route with people's daily commuter movements, to take advantage of consumer needs and demands today. The main strategy would be to capture the daily commuter by locating shopping centers along downtown stations and alongside commercial centers.

Despite its convenient location and high traffic volume, the success of these shopping areas will require a unique strategy. The retail center should aim to offer services for commuters and users such as postal offices, laundry, Internet, photo processing, etc. They must recognize the needs of the consumer, not just provide easy access shopping.

Furthermore, lifestyle and family orientated retailing will impact the consumer market.

Entertainment, education, food and beverage outlets, incorporating such buzzwords like education, eat-tainment and shopper-tainment for the shopper who has limited time.

Beauty and health retailers such as spas, and gyms and health clubs will also rise as a large market as Salt Lakers become more health-conscious.

The 55- to 64-year-old age group will grow fastest in the next decade, and will create opportunities for development of downtowns and cities and such "sophisticated" entertainment venues as conference centers and performing arts centers.

Development of a new retail center of the redevelopment of established shopping centers involves evaluating all aspects of the shopping center. Given the tremendous impact of location on a shopping center's success, property owners and retailers will want to make their decisions with as much information and insight as possible including: such as demographic statistics and traffic patterns.

- Its market
- Its competition
- Its anchor agreements
- Its financing
- Its tenant mix
- Its lease forms
- Its tenant criteria
- Its physical condition
- Its utilities
- Its traffic patterns
- Its household income
- Population growth for its trade area

The focus will be on formulating and implementing new strategies to strengthen market share and extend the Sandy Retail Center's market; create design and operating efficiencies; enhance its appeal to new tenants; renegotiate expiring leases, agreements and easements; and create income from utilities.

And the challenge is "how do you make it convenient for them"?

Shopping patterns will be heaviest over the lunch hour and after work, so retailers will have to staff up for those periods. The store may also want to offer a parcel pickup service for those who want to gather their purchases at the end of the day, rather than lugging them back to work.

Distances Shoppers will Travel for Specific Shopping Goods

This information is based on market research commissioned by the Newspaper Agency's detailed study of the demographics and market studies of the Salt Lake area market. The study highlights shopping and purchasing behavior, intentions and attitudes of adults in the Salt Lake primary market area.

Distances Shoppers will Travel for Specific Shopping Goods					
Distance in Miles					
Type of Shopping Trip	Up to 1	Up to 5	Up to 10	Up to 15	15+
New Clothes	100%	97%	71%	46%	57%
Grocery (to stock up)	100%	90%	45%	21%	17%
Routine Grocery	100%	67%	14%	4%	4%
Yard and Garden	100%	90%	45%	16%	7%
Pharmacy	100%	70%	19%	7%	10%

Source: NAC, 1999; Bonneville Research, 2001

Retail Vacancy/Absorption – Salt Lake Area Market

The Retail Vacancy/Absorption information is based on market research conducted by the Colliers Commerce CRG detailed study of the Salt Lake area real estate market. The study highlights the amount of current retail space available in the market, the amount vacant, the amount of new space leased up (absorbed) and the amount of new space constructed. This chart presents the information by classification of type of retail center.

Retail Vacancy/Absorption – Salt Lake Area Market				
	2000 Total SF	2000 Avail SF	2000 Absorb SF	2000 Const
Regional Mall	4,947,100	113,152	21,763	0
Super Community Regional Center	2,904,827	149,559	72,577	136,501
Community Center	7,620,669	390,391	260,710	369,061
Neighborhood Center	4,053,047	265,053	292,557	339,430
Convenience- Anchorless Strip	1,852,333	136,496	143,963	72,590

Source: Colliers Commerce CRG 2001, Bonneville Research, 2001

Retail Vacancy/Absorption

The Retail Vacancy/Absorption information is based on market research conducted by the Colliers Commerce CRG detailed study of the Salt Lake area real estate market. The study highlights the amount of current retail space available in the market, the amount vacant, the amount of new space leased up (absorbed) and the amount of new space constructed. This chart presents the information by sector. Sandy City falls in the Southeast Sector

Retail Vacancy/Absorption				
	2000 Total SF	2000 Avail SF	2000 Absorb SF	2000 Const
Southeast Sector	6,117,803	292,839	134,109	210,060
Northeast Sector	3,148,504	75,173	148,684	32,207
Central East Sector	4,803,020	126,572	-39,790	10,080
Northwest Sector	441,900	19,940	14,000	18,600
Central west Sector	4,617,898	450,943	-28,812	151,817
Southwest Sector	2,249,451	89,184	463,179	494,18

Source: Colliers Commerce CRG 2001, Bonneville Research, 2001

Department and Discount Store Market Share

The Department and Discount Store market share information is based on market research commissioned by the Newspaper Agency's detailed study of the demographics and market studies of the Salt Lake area market. The study highlights shopping and purchasing behavior, intentions and attitudes of adults in the Salt Lake primary market area. Thus, forty-eight percent of adults did most of their shopping at Fred Meyer, with 45% making some of their purchases at Fred Meyer with 45% making a purchase. Fred Meyer had no change in market share from 1997 to 1998.

Department and Discount Store Market Share			
Listed in rank order	30 Day Shopping	30 Day Purchases	1997-98 Change
Fred Meyer	48%	45%	0%
Kmart	48%	43%	0%
ShopKo	44%	37%	-6%
Wal-Mart	38%	34%	-3%
Super Target	32%	29%	+14%
ZCMI	32%	24%	-9%
Mervyn's	26%	22%	-10%
Sears	25%	20%	+4%
Costco	21%	19%	+24%
JCPenny	21%	16%	0%
Sam's Club	18%	17%	-14%
Nordstrom	16%	12%	-6%
Dillard's	13%	11%	+30%

Source: NAC 1999; Bonneville Research, 2001

Retail Center Market Share

The retail center market share information is based on market research commissioned by the Newspaper Agency's detailed study of the demographics and market studies of the Salt Lake area market. The study highlights shopping and purchasing behavior, intentions and attitudes of adults in the Salt Lake primary market area. Thus, fifty-one percent of adults shopped at Fashion Place Mall during the last 90 days, with 43% making a purchase.

Retail Center Market Share		
(Listed in rank order)	90 Day Shopping	90 Day Purchases
Fashion Place Mall	51%	43%
Cottonwood Mall	38%	31%
South Towne Center	34%	28%
Family Center Fort Union	33%	27%
Family Center Midvalley	32%	28%
Valley Fair Mall	31%	26%
Crossroads Mall	29%	21%
Sugar House	27%	23%
ZCMI	26%	21%
Trolley Square	24%	19%
Brickyard Plaza	21%	19%
Factory Stores of Draper	21%	17%

Sandy Mall	18%	16%
Factory Stores of Park City	17%	15%
Foothill Village	13%	12%
Stores at Holladay Blvd & 4800 S	12%	9%
Family Center East Downtown	10%	10%
Five Points Shopping – Bountiful	7%	5%
Olympus Hills Center	7%	5%

Source: NAC 1999; Bonneville Research, 2001

Grocery Store Market Share

The grocery store market share information is based on market research commissioned by the Newspaper Agency's detailed study of the demographics and market studies of the Salt Lake area market. The study highlights shopping and purchasing behavior, intentions and attitudes of adults in the Salt Lake primary market area. Thus, twenty-eight percent of adults did most of their shopping at Albertson's, with 23% making some of their purchases at Albertson's for a total of 51% of adults shopping there in the last 7 days. Albertson's had a 6% increase in market share from 1997 to 1998.

Grocery Store Market Share				
Listed in rank order				
	Shopped Most Last 7 Days	Also Shopped Last 7 Days	Total 7 Day Market Share	1997-98 Change
Albertson's	28%	23%	51%	+6%
Smith's	22%	21%	42%	-11%
Harmon's	11%	6%	17%	0%
Fred Meyer	7%	8%	14%	-7%
Ream's	6%	6%	12%	0%
Dan's	4%	5%	9%	-20%
Food 4 Less	5%	4%	9%	-10%
Super Target	4%	4%	7%	+40%
Macey's	3%	3%	6%	0%
Costco	3%	2%	5%	na
Sam's Club	2%	1%	3%	-25%
Dick's Market	2%	1%	3%	na
IGA	0.3%	0.2%	0.5%	-75%
Other	5%	5%	10%	na

Source: NAC 1999; Bonneville Research, 2001

Clothing Store Market Share

The clothing store market share information is based on market research commissioned by the Newspaper Agency's detailed study of the demographics and market studies of the Salt Lake area market. The study highlights shopping and purchasing behavior, intentions and attitudes of adults in the Salt Lake primary market area. Thus, forty-four percent of adults shopped at Mervyn's in the last 12 months, with 17% making a purchase.

Clothing Store Market Share			
Listed in rank order	12-Month Shopping	30 Day Shopping	1997-98 Change
Mervyn's	44%	17%	-14%
ZCMI	39%	18%	13%
Kmart	39%	16%	-5%
JCPenny	38%	13%	-5%
ShopKo	36%	13%	-8%
Fred Meyer	34%	11%	-13%
Old Navy	32%	9%	+23%
Super Target	27%	10%	+8%
Dillard's	26%	10%	+4%
GAP	23%	10%	-4%
Nordstrom	23%	8%	-18%
Sears	20%	5%	-29%
Burlington Coat Factory	19%	3%	+12%
T.J.Maxx	17%	5%	+13%
Nordstrom Rack	16%	4%	+7%
Mr. Mac's	7%	1%	-22%
Chalk Garden	5%	2%	+67%
Village Limited	1%	.03%	0%

Source: NAC 1999; Bonneville Research, 2001

Demographics of Potential Sandy Downtown Community Center Tenants

The retail store demographic information is based on market research commissioned by the Newspaper Agency's detailed study of the demographics and market studies of the Salt Lake area market. The study highlights shopping and purchasing behavior, intentions and attitudes of adults in the Salt Lake primary market area. These projections are based on the demographics of the Sandy population living within a ten (10) mile radius and compare these demographics with likely tenants. Thus, thirteen percent of adults who shopped at Wal-Mart had a family income of less than \$25,000 compared to 27% the residents living within a 10 mile radius of 106th South.

INCOME

	106th So 10 mile	Wal-Mart	Super Target
INCOME - 2000			
% Under \$25,000	16%	13%	9%
% \$25,000-\$34,999	13%	16%	17%
% \$35,000-\$49,999	21%	28%	24%
% \$50,000-\$74,999	25%	26%	28%
% \$75,000+	24%	18%	22%

	106th So 10 mile	ShopKo	Kmart
INCOME - 2000			
% Under \$25,000	16%	15%	13%
% \$25,000-\$34,999	13%	18%	14%
% \$35,000-\$49,999	21%	26%	20%
% \$50,000-\$74,999	25%	26%	29%
% \$75,000+	24%	16%	25%

	106th So 10 mile	Costco	Fred Meyer
INCOME - 2000			
% Under \$25,000	16%	10%	12%
% \$25,000-\$34,999	13%	13%	15%
% \$35,000-\$49,999	21%	23%	24%
% \$50,000-\$74,999	25%	24%	27%
% \$75,000+	24%	30%	22%

Age and Gender

The retail store demographic information is based on market research commissioned by the Newspaper Agency's detailed study of the demographics and market studies of the Salt Lake area market. The study highlights shopping and purchasing behavior, intentions and attitudes of adults in the Salt Lake primary market area. These projections are based on the demographics of the Sandy population living within a ten (10) mile radius and compare these demographics with likely tenants. Thus, forth-eight percent of adults who shopped at Wal-Mart were male compared to 49% the residents living within a 10 mile radius of 106th South.

	106th So 10 mile	Wal-Mart	Super Target
Age and Gender			
% Male	50%	48%	45%
% Female	50%	52%	55%
% 18-24	12%	11%	17%
% 25-34	14%	23%	25%

% 35-44	15%	28%	26%
% 45-54	12%	16%	17%
% 55-64	7%	10%	8%
% 65+	13%	12%	7%

	106th So		
Age and Gender	10 mile	ShopKo	Kmart
% Male	50%	45%	46%
% Female	50%	55%	54%
% 18-24	12%	13%	10%
% 25-34	14%	20%	20%
% 35-44	15%	26%	26%
% 45-54	12%	17%	16%
% 55-64	7%	10%	12%
% 65+	13%	14%	16%

	106th So		
Age and Gender	10 mile	Costco	Fred Meyer
% Male	50%	50%	47%
% Female	50%	50%	53%
% 18-24	12%	8%	12%
% 25-34	14%	20%	19%
% 35-44	15%	24%	25%
% 45-54	12%	23%	19%
% 55-64	7%	12%	12%
% 65+	13%	14%	13%

Sandy Downtown Retail Potential

Projections of Demand for Retail Expenditures

These projections are based on annualized data from the Consumer Expenditure Survey, and are based on the income levels and expenditure patterns of the households in the retail market area.

RETAIL SALES BY MAJOR STORE TYPE²

As indicated in the Summary, Census Bureau data can lend perspective to this analysis, so this paper will touch briefly upon sales figures (which provide context for the discussion of consolidation) and store count data from the two most recent Censuses of Retail Trade.

GAFO	
Conventional Department Stores	\$56
Discount Department Stores	151
National Chains	42
Variety Stores	8
Miscellaneous GM Stores	56
General Merchandise Subtotal	\$313
Women's Apparel	29
Women's Accessories	4
Men's and Boys' Apparel	10
Family Apparel	42
Miscellaneous	10
Shoes	19
Apparel & Accessories Subtotal	\$114
Furniture	39
Floor Coverings	12
Household Appliances	9
Radio, TV & Computer	47
All other	26
Furniture & Furnishings Subtotal	\$133
Jewelry	20
Sporting Goods	22
Book Stores	12
All Other	40
Other GAFO Subtotal	\$94
GAFO Subtotal	\$654
Convenience	
Grocery	\$400
Other Food	23
Drug	91
Convenience Subtotal	\$514

² U.S. Department of Commerce, Bureau of the Census, *Annual Benchmark Report for Retail Trade*, January 1987 through December 1996, BR/96-RV, May 1997.

Home Improvement & Building Supplies	134
Shopping Center-Inclined Subtotal	\$1,302
Automotive Dealers	605
Gas Stations	157
Eating & Drinking Places	238
All Other	143
TOTAL RETAIL SALES	\$2,445

Retail Consolidation³

Fewer firms and fewer firms are increasing sales and market dominance within their respective store types. Numerous store types that are key elements in U.S. shopping centers are dominated by a small group of retailers in each category that register a third or more of their respective category's total U.S. sales.

Discount department stores, conventional department stores and toy stores are the store types where three or fewer companies capture 50% or more of sales; book stores, shoe stores, consumer electronics/TV/appliance stores, family apparel stores, drug stores and building materials and supply stores all feature three firms that capture 30% to 45% of annual U.S. sales.

Supermarkets, men's apparel stores, sporting goods stores and furniture stores feature the least concentration of sales among the top three firms -- 8% to 14%.

For many store types, consolidation of sales among the top three firms is continuing. Since 1986, the share of store-type sales captured by the three leading discount department store firms, conventional department store firms, and building materials and supplies firms has risen by at least 20 percentage points in each case. For family apparel stores, drug stores, and consumer electronics/TV/appliance stores, top three's share has risen by 12% to 19%. Only among men's and boys' apparel stores and supermarkets have the leaders' shares declined.

Finally, most of the store types for which comparable 1986 and 1996 sales data were analyzed exhibited high levels of 1986-1996 category sales growth capture by the three biggest firms in each store type. The leading conventional and discount department stores of 1996 captured all of their store types' net sales gain since 1986; in several other categories, the leaders captured 50% to almost two-thirds of their store type's net sales gain.

CONVENTIONAL DEPARTMENT STORES

Time has passed, but the effects of department store merger and acquisitions activities during the mid- and late-1980s continue. Today the top three conventional department store firms register just under 60% of total conventional department store sales in the U.S., up from 39% 10 years ago. The sales of the top three firms in this sector were about \$33 billion in 1996, reflecting a 6.3% per year growth rate over the \$18 billion registered by the three leading conventional department store firms of 1986. The remaining firms registered average annual sales loss of 2.0%.

DISCOUNT DEPARTMENT STORES

Discount department store firms exhibit a higher degree of leader firm sales concentration than their conventional counterparts. In 1986, the then-leading firms captured 61% of this sector's sales, but by 1996 this capture rate had risen to 85%. Sales registered by discount department store firms other than Wal-Mart, Kmart and Target in 1996 were \$22 billion, the same as in 1986.

³ International Council of Shopping Centers, 2001

BUILDING MATERIALS AND SUPPLIES

Home Depot and Lowe's are leading the building materials and supply store group in a similar direction. A decade ago, the three sector leaders generated an 11% share of this store-type's total sales; the top three captured 31% of the sector's sales in 1996. Evidence of further sector consolidation includes the purchase and possible merger by Leonard Green & Co. of Hechinger's (117 stores) and Builders Square (162 stores), plus the July 1997 Chapter 11 filing of Payless Cashways (194 stores; at least 29 reportedly to be closed). The sales dynamic here resembles that of the two store types already discussed -- the sales of the sector leaders are growing by almost three times the annual rate of the sector as a whole (18.2% vs. 6.2%) and far more than the small operators within the store type (3.4% per year).

CONSUMER ELECTRONICS

Within the consumer electronics, TV and appliances store group, the top three firms in 1996 (Best Buy, Circuit City and Comp USA) generated about \$19 billion in sales, or 34% of this sector's total; these figures reflect a share increase from 1986's top three's 15% as well as a 16.9% average annual sales growth rate over 1986's top three's total. As a whole, this store group exhibited a 1986-1996 sales growth rate of 7.6%; firms outside the three largest grew their sales by about 4.9% per year.

TOYS

The toy store sector review employs estimates of both toy store group sales in 1986 and 1996, as well as Toys 'R' Us domestic sales. Industry estimates of the distribution of toys by retail distribution channel indicate that 50% or more of toy sales are registered outside of toy stores. Within the toy store sector, however, Toys 'R' Us captured about 42% of toy store sales in 1986 and 54% in 1996. This one firm's rate of sales growth during the past 10 years has been almost double that of all other toy stores.

FURNITURE

Furniture stores exhibit a very different pattern. The top three firms of 1986 only captured 5% of this sector's sales, and the top three of 1996 only captured 8%. Nonetheless, the 1996 top three's sales reflected an 8.7% per year growth rate over the top three's sales level in 1986 -- more than double the growth rate of this store type as a whole.

SUPERMARKETS/GROCERY STORES

The \$400 billion-per-year grocery store business, according to estimates collected for this paper, is one of the least concentrated of all retail sectors, and may even have become more diffuse since 1986. The three largest U.S. grocery store chains in 1996 (Kroger, Safeway and Albertson's) registered sales of about \$54 billion -- 14% of this sector's total and only \$4 billion more than the top three's 1986 sales. Sales of the top three firms of 1986 are estimated to have been 18% of sector sales that year. Nonetheless, industry leaders are involved in various expansion and consolidation initiatives. Regional expansion is a preferred tactic for many, while acquisition appeals to others. Perhaps the most active grocery chain consolidation in 1997 was Fred Meyer (Yucaipa), which followed up its 1996 acquisition of Smith's Food and Drug (152 stores, \$2.9 billion in sales) with 1997 acquisitions of Ralph's/Food 4 Less (406 stores, \$5.6 billion in sales) and Quality Food Centers/Hughes (147 stores, \$2.1 billion in sales). This makes it one of the largest grocers in the U.S.

DRUG STORES

The drug store business is moving quickly. As a group, drug store sales are growing by about 6% per year (from \$51 billion in 1986 to \$91 billion in 1996); however, the sales level of the three sector leaders in 1996 reflected a 12.8% sales growth rate over the top three's sales level of 10 years ago -- double the growth rate for this store type as a whole. Smaller firm sales are growing about 3.8% per year.

The three largest firms of 1996 captured 33% of this store type's sales, versus 18% a decade ago. Rite-Aid and JCPenney provide examples of management response to advantages of size. Rite-Aid followed up its 1996 purchase of Thrifty (1007 stores) with 1997 purchases of K&B (186 stores, \$600 million in sales) and Harco (146 stores, \$260 million in sales). JCPenney Co.'s Thrift Drug division, having bought Fay's in 1996, closed on the acquisition of Eckert in the first quarter of 1997, making it an almost \$10 billion firm (renamed Eckerd). Walgreen's, this sector's sales leader, focuses primarily on internal expansion.

FAMILY APPAREL

Reflecting the steady growth of The Gap family of stores as well as the growth, then merger of T.J. Maxx and Marshall's, the level of capture by the top three family apparel store firms almost doubled in the 10 years between 1986 and 1996 -- from 16% of sector sales to 31%. During this time, family apparel stores were the fastest growing apparel store group, expanding their sales by 8.3% per year. The 1996 sales of the three leading firms, however, reflected a 15.8% growth rate, while others in this store type grew at an average of 6.1% per year.

WOMEN'S APPAREL

The picture for women's ready-to-wear stores is a bit different. This store group as a whole raised its sales from \$26 billion in 1986 to \$29 billion in 1996 -- a growth rate of 1.1% per year. Estimates of sales for the three 1986 leaders indicate sales of about \$5.5 billion; 1996's leaders' estimated sales of \$7.2 billion indicated an average annual sales growth of 2.7%. Their sector share rose from 21% in 1986 to 25% a decade later.

MEN'S AND BOYS' APPAREL

Men's and boys' apparel is the most fragmented of the major apparel store sectors, particularly with the demise of the Hartmarx store group. The top three firms accounted for only 14% of this segment's \$10.2 billion sales, down slightly from its 15% share in 1986.

Key Findings Include:

In several store-type categories, the three leading retail firms have evidenced signs of increasing sales dominance, as measured by:

- Their share of total sales registered by all stores in their store-type category; The growth in the top 3's share of sales registered by all stores in their store-type category; or Their capture of the sales growth registered between 1986 and 1996 by all stores in their store-type category
- Among the types of retail stores showing greatest evidence of sales consolidation among sector leaders are:
 1. Building materials and supply stores
 2. Consumer electronics, TV & appliance stores
 3. Conventional department stores
 4. Discount department stores
 5. Drug stores
 6. Family apparel stores
 7. Toy stores

Among the types of stores showing least consolidation of sales leadership by the few large firms are:

1. Furniture stores
 2. Grocery stores and supermarkets
 3. Men's and boys' apparel stores
 4. Sporting goods stores
- The rise in shopping center GLA nationwide in the face of declining numbers of retail units places bright, sharp focus on developers', owners' and managers' need to select

tenants carefully; in several key store-type categories, only a few tenants are available to make a given center investment-worthy; and

- Consolidation of sales dominance among only a few operators is continuing, not diminishing.

This rate of slippage in the store count is not uniform across all store types. Furniture and Furnishings stores data showed a significant decline. More important were the more moderate, steady declines in the number of stores reported by family shoe stores, women's shoe stores, appliance stores, and department stores.

Household Furnishings	30%
Furniture	26%
Gift	20%
Family Shoe	9%
Appliance	5%
Woman's Shoe	3%
Conventional Department	2%
Discount Department	1%

*Source: *Icsc Shopping Centers Today*, "Retail Ownership Scorecard", 1998-1997

Projections of Demand for Retail Space Required to Support the Anticipated Retail Demand.

The major store types recording highest 1999 sales per square foot in these 2000 Index results were:

• Jewelry	\$905
• Food Courts	634
• Fast food (Misc)	468
• Men's shoes	473
• Women's accessories & specialty	440
• Children's shoes	386
• Family Apparel	385
• Women's shoes	385
• Home entertainment & electronics	376

The key store types recording highest percentage growth in sales square foot in these 2000 Index results were:

• Sporting Goods	8.5%
• Women's Ready to Wear	6.8%
• Family Shoes	5.7%
• Athletic Shoes	5.5%
• Men's Apparel	3.5%
• Children's shoes	3.0%

5 Mile Market Area

Total Retail Expenditures - 2000	Retail Sales	Potential Retail Sales
	\$/HH	(\$000)
Five Mile Market Area		
Total Retail Expenditures	\$17,548	\$1,274,890
Food Service	5,269	382,776
Apparel & Services	1,338	97,207
Drug	481	34,978
Transportation	5,368	390,028
Leisure & Entertainment	1,760	127,893
Home Furnishings	2,704	196,484
Other Retail Expenditures	627	45,526

10-Mile Market Area

Total Retail Expenditures - 2000	Retail Sales	Potential Retail Sales
	\$/HH	(\$000)
Ten Mile Market Area		
Total Retail Expenditures	\$ 17,214	\$ 3,259,760
Food Service	\$ 5,215	\$ 987,530
Apparel & Services	\$ 1,312	\$ 248,430
Drug	\$ 490	\$ 92,784
Transportation	\$ 5,216	\$ 987,739
Leisure & Entertainment	\$ 1,709	\$ 323,667
Home Furnishings	\$ 2,647	\$ 501,201
Other Retail Expenditures	\$ 625	\$ 118,408

15 Mile Market Area

Total Retail Expenditures - 2000	Retail Sales	Potential Retail Sales
	\$/HH	(\$000)
Fifteen Mile Market Area		
Total Retail Expenditures	16,418	4,985,383
Food Service	5,048	1,532,770
Apparel & Services	1,250	379,558
Drug	481	146,020
Transportation	4,926	1,495,921
Leisure & Entertainment	1,609	488,509
Home Furnishings	2,493	756,908
Other Retail Expenditures	612	185,697

Demand for Retail Space

To compute the amount of retail space that will be required in the Sandy Downtown market area we used the following estimates of the amount of square feet of space per square foot of retail space. Estimates of the annual demand were prepared using the ten (10) mile market area.

Retail Category	10 Mile Retail Potential	Sales Per Sq Ft	Supportable Sq Ft of
-----------------	-----------------------------	--------------------	-------------------------

Retail Space

Total Retail Expenditures	\$3,259,760	\$341	9,559,413
Food Service	\$987,530	423	2,334,586
Groceries	\$664,461	497	1,336,944
Dining Out	\$262,321	341	769,270
Other	\$60,749	408	148,895
Apparel & Services	\$248,430	329	755,106
Women's	\$84,346	440	191,695
Men's	\$53,030	316	167,816
Family	\$46,818	385	121,605
Shoes	\$26,716	300	89,053
Watches and Jewelry	\$29,439	905	32,529
Other	\$8,082	974	8,298
Drug	\$92,784	404	229,663
Prescription	\$40,935	404	101,324
Personal Care	\$51,849	342	151,605
Transportation	\$987,739	162	6,097,154
Leisure & Entertainment	\$323,667	77	4,203,468
Books and Periodicals	\$35,693	243	146,885
Pet Care	\$27,669	287	96,408
Sporting Goods	\$22,006	234	94,043
Toys	\$22,673	287	79,000
Video Purch/Rental	\$17,990	362	49,696
TV/VCR/Video Cameras	\$13,502	376	35,910
Audio Equip	\$4,546	376	12,090
Photo Equip & Film Proc	\$8,864	362	24,486
Other	\$170,725	72	2,371,181
Home Furnishings	\$501,201	314	1,596,182
Refrigerators/Freezers	\$2,251	314	7,169
Washers/Dryers	\$1,691	314	5,385
Stoves/Ovens/Microwaves	\$1,554	314	4,949
Small Kitchen Appliances	\$3,877	314	12,347
Living/Dining/Kitchen Furniture	\$34,581	314	110,131
PC Software/Hardware	\$23,200	376	61,702
Housewares	\$38,132	314	121,439
Other Home Improvement	\$54,876	386	142,166
Home Improvement	\$240,165	386	622,189
Home Services	\$100,874	342	294,953
Other Retail Expenditures	\$118,408	400	296,020

Thus, it would seem reasonable that the Sandy Downtown market area could be expected to be able to support between 9,560,000 square feet of retail space over

the next five years.

Office Market Analysis

The analysis of the market for commercial office development in the Sandy Downtown Sandy Downtown examined trends in the economy of the Salt Lake Metropolitan region, and carefully analyzed factors, which affect the rate and direction of change in the area's office employment. This office market study builds on the demographic and housing evaluations presented earlier. It further develops the following additional parts:

1. Definition of the office market area of the Sandy Downtown.
2. Projections of Demand, Supply, and Unmet Demand for Commercial Office Space.
3. Computations of the Requirements of Commercial Office Space Required to Support the Demand for Office Space.
4. Determination of the likely Net Capture of Office Space in the Sandy Downtown.

Commercial Office Space Market Area

The Sandy Downtown market area is considered to be part of the Central Suburban region within the Salt Lake Metro Region. Unlike the retail trade area however, the Commercial Office Space Market Area is typically not determined primarily by the time and distance relationships between the office-building site and the people will occupy it.

Projections of Commercial Office Space Employment

Projections of employment in the Sandy Downtown market area were derived from projections of employment for the Salt Lake Metro Region, as developed by State of Utah, Workforce Services.

	Due to Growth	5 yr. Growth	Wasatch Front @ 70%
Total - All Categories	30,390	151,950	106,365
Professional & Paraprofessional	6,350	31,750	22,225
Production, Operating, & Maintenance	6,120	30,600	21,420
Sales & Related	4,680	23,400	16,380
Clerical & Administrative Support	3,250	16,250	11,375
Managerial & Administrative	2,770	13,850	9,695
Technical	1,670	8,350	5,845
Service	5,140	25,700	17,990
Agriculture, Forestry, Fishing	410	2,050	1,435

	Wasatch Front @ 70%	Sandy @ 3%	Sandy @ 5%
Total - All Categories	106,365	3,191	5,318
Professional & Paraprofessional	22,225	667	1,111
Production, Operating, & Maintenance	21,420	643	1,071
Sales & Related	16,380	491	819
Clerical & Administrative Support	11,375	341	569

Managerial & Administrative	9,695	291	485
Technical	5,845	175	292
Service	17,990	540	900
Agriculture, Forestry, Fishing	1,435	43	72

Demand for Office Space

To compute the amount of office space that will be required in the Sandy Downtown market area we used the following estimates of the amount of square feet of space per employee. Estimates of the annual demand for new office space were prepared for both the 3% capture estimate and the 5% target estimate.

	Est. sq. ft. per Employee	106 th So @ 3%	106 th So @ 1%
Total - All Categories		652,313	217,000
Professional & Paraprofessional	350	233,363	78,000
Sales & Related	200	128,520	42,000
Clerical & Administrative Support	200	98,280	32,800
Managerial & Administrative	350	119,438	40,000
Technical	250	72,713	24,000
Production, Operating, & Maintenance	175	112,455	37,500

Thus, it would seem reasonable that the Sandy Downtown market area could be expected to be able to support between 650,000 and 200,00 square feet of new commercial office space plus an additional 100,000 to 40,000 square feet of new production space over the next five years.

